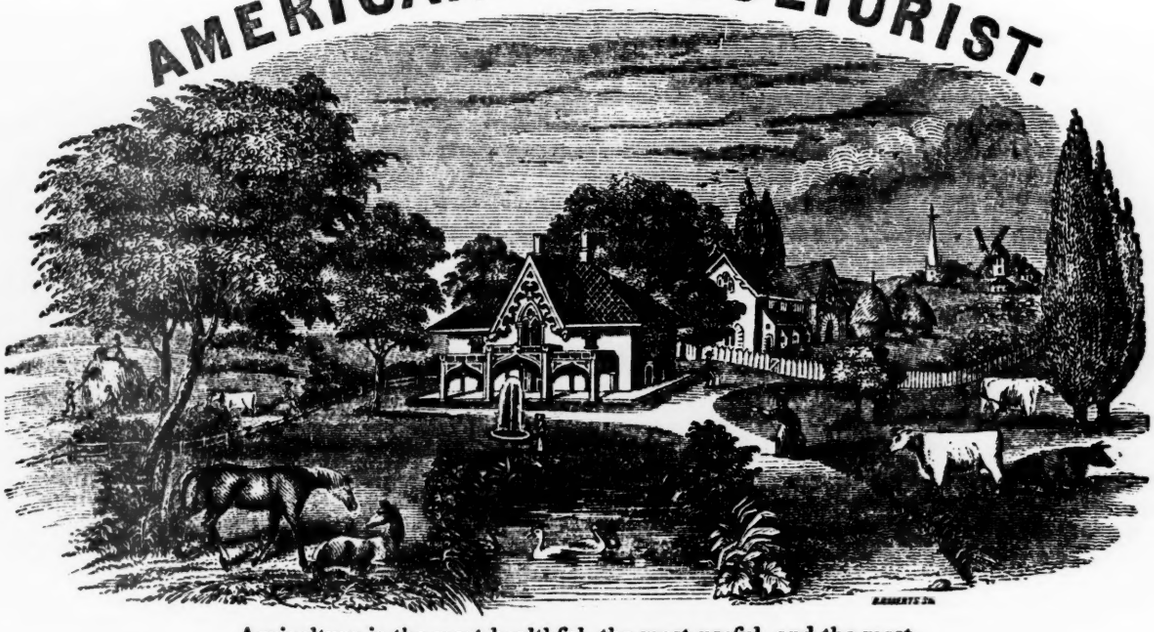
THE

AMERICAN AGRICULTURIST.



Agriculture is the most healthful, the most useful, and the most noble employment of Man.—*Washington.*

VOL. III. NEW YORK, MAY, 1844. NO. V.

A. B. Allen, Editor. Saxton & Miles, Publishers, 205 Broadway.

STEEPING SEEDS BEFORE SOWING

It is frequently of great benefit to use a steep for certain seeds before planting. A solution of saltpetre is one of the most valuable for this purpose. By saturating the seed with this salt, a quick and rapid growth is given to the young plant, which brings it to a much earlier and greater maturity than would be otherwise secured. It is also a preventive against the ravages of insects, protecting the young vegetable till it reaches a sufficient growth to resist their injurious effects in a great manner. For turnep-seed, soaking in tanner's oil is an excellent preventive against the attack of the fly, besides yielding nutriment to the plant, by which it more speedily gets beyond its fatal influence.

CULTURE OF FLAX.

We are surprised that our farmers do not turn their attention more to the cultivation of flax. This is a crop easily raised, and when properly managed, a very productive one. It is somewhat exhausting when its seed is permitted to come to full maturity, as is the general practice in this country. But we can not expect to make our cake without dough, and when we get a large crop of seed, we get a full equivalent for the exhaustion. When raised as it usually is in Ireland, where large crops are cultivated, and pulled before the seed ripens, so as to secure a more delicate fibre for the best qualities of linen, it is not exhausting. Our practice, owing to the coarser fabrics we manufacture from it, is to secure both fibre and seed, which, for our purposes, is undoubtedly the most profitable. The seed is one of the most, perhaps, decidedly the most nutritious that can be given to stock, when boiled or soaked in hot water for a sufficient time. As an article of commerce, it is quite an object to raise, yet when carried off the land for consumption, it will be necessary to use manures plentifully, to keep it in proper condition.

But one of the great advantages to be derived from this crop, is, the employment which getting it out gives to the men and boys, and to the women and children in spinning and weaving in winter, when they have little else to do, and for the want of which, they are too frequently idle, or something worse. As a means for the improvement and preservation of industrious economical habits, it is of great value, independent of its profit as a field-crop. About 400 pounds of flax, and 12 bushels of seed is a fair crop from an acre. The flax is worth 8 to 10 cents per lb. in this market; the seed $1,40 to $1,60 per bushel.

FARM OF MR. GIBBONS.

This farm consists of about 600 acres in one body, and is situated in the town of Madison, Morris county, New Jersey, 25 miles west of this city, and can be approached in two hours by the Morristown railroad. The soil, generally, is of a sandy or light gravelly character, though some parts of it may more properly be characterized as a loam. In order to ensure a more perfect management, the farm is divided into three sections of about 200 acres each; the first 200 being reserved by its opulent owner for his private grounds around the mansion, and the remaining 400 are nearly equally distributed between two tenants, each with its own independent set of buildings.

This farm was in a very low state when purchased by Mr. Gibbons a few years since, or to use a more common phrase, nearly run out. His improvements upon it have been gradual, and are still *progressive*, as he modestly says he has much to learn, and considers as yet that he has just begun. It is not necessary for us to go into minute particulars in describing the management of this farm, suffice it to say, the rotation of crops is such as is practised by the most enlightened system of New Jersey; that all the manure is carefully husbanded and applied; lime, and other foreign fertilizers, are added when it is considered necessary, and the land is already restored to such a state of fertility as to produce the most bountiful crops.

Stock.—Mr. Gibbons has for some time more particularly devoted his farm to the raising of improved stock; and of this, his chief delight seems at present to centre in Durham cattle, and blood-horses. For the foundation of the former, he commenced by importing direct from England, two bulls and a few choice cows, which were selected for him with much care by a friend then travelling abroad. These he has continued to breed with attention since their arrival here, and he has now surrounding him a very pretty herd. Among them we greatly admired Fortune, 6 years old, out of the imported cow Volage. She is of a rich roan color, of good size in a small compass, handles well, is fine in her points, carries a superb brisket, and has proved herself, in accordance with her name, quite a *fortune* to her owner, having already produced him in the shape of three beautiful heifers, the three great virtues of Faith, Hope, and Charity. Faith is a rangy, fashionable animal, and already the dam of a pair of handsome twin heifers. Hope is a gem in her way, in shape like her dam, and holds forth much promise, which we may safely trust will not be disappointed. As for Charity, she is not sufficiently grown yet to give an opinion upon her merits, and we can only add, that we shall expect her, at a proper age, to *charitably* commence breeding, and continue favoring her owner every year thereafter, till well in her teens, with a handsome image of herself. Moonbeam is a superb 3-year old, much like Fortune in shape and other qualities. She indicates good milking properties, and has a perfect bag; the teats in their position forming an exact square and slightly pointing out.

Of the bulls, upon the whole, we liked Majestic best. He is (2249) in the Herd-Book, and was the first one imported. He is heavy and compact, with a good brisket and quarter, and these are the animals to our taste. Arthur, the second importation, is long and rangy, and may, perhaps, be the most popular with the public. Zero, 4 years old, by Majestic, out of Volage, is a noble animal; fine in the head, and possesses many other good qualities. In addition to these, Mr. Gibbons has several other thorough-breds, and quite a herd of high grades, both here and at another farm in Elizabethtown; good milkers, especially for quality, making most excellent family cows.

His bulls he more generally transfers when quite young, and in the autumn, to his rice plantations, near Savannah, Georgia; where, after undergoing the process of acclimating, he disposes of them to the planters for the purpose of improving the southern stock. This is an excellent plan, and cattle stock are much more likely to do well taken from the middle states to the south; when imported direct from the cool, moist climate of England, they are sure to die, or become utterly worthless for breeding. It is the same also with sheep; horses and swine do better. We contend with Mr. Gibbons that acclimation should be gradual.

Of the horses we shall speak at length in a communication we intend for the Spirit of the Times, that being a more proper periodical for the discussion of the merits of thorough-breds than our limited farm journal. We may however say, *en passant*, that in this department Mr. Gibbons at present stands at the head, and with his unconquerable Fashion, and several other animals equally promising, he may safely challenge the Union. His breeding-stud is large, the grounds for it very appropriate, and the stables, sheds, and paddocks, without being expensive, are more perfectly and commodiously arranged than we have elsewhere seen in the United States. Yet, notwithstanding their high breeding, there are several animals here, that we are confident would greatly improve our roadsters by crossing on the common stock of the country. Mariner, for example, although only 15 hands high, strikes us as being a horse of very great substance in that compact form, and put to roomy mares, we are confident the produce would have size enough. He is a singular thorough-bred, and deserving a minute description, even in a strictly agricultural paper.

In form he is a complete Arabian. His head is fine, with small ears, broad forehead, eyes like a deer, and large open nostril; mane and neck fine, the latter beautifully arched; chest full and deep; back short and strong; body well ribbed up. long under the belly, and round like a barrel; quarters in proportion to those of an English cart-horse, full, round, and superbly developed; tail well set on, and when moving, carried with a graceful curve; hind legs straight, fine, and muscular; the joints of the fore legs very strong, and short from the knee down; the pasterns shorter and stronger than is usual with racers; and the hoof clear, tough, and open. His color is of the very best kind, and denotes endurance, being brown with a tanned muzzle. His action either in walking, trotting, or galloping, very fine; and as for game and endurance, few could ever run with him—his *twelfth* mile

usually being his *best*. Added to all this his temper is pretty good, and he is easily kept. Mr. Gibbons thinks very highly of this horse, and is now breeding to him exclusively. We wish for the sake of the country, that a dozen good roomy roadster mares could be put to him in order to test the produce; for farm and carriage-horses, we are persuaded the stock would be all that could be desired. The pedigree of Mariner is of the very best kind; all his family having been celebrated for great endurance, strength, and speed. Shadow is also a splendid animal, three inches taller than Mariner, and both him and the bull Zero, Mr. Gibbons allowed to stand last year, and will do the same the present season, at a moderate price, at Morristown. We really hope the farmers of that vicinity will avail themselves of this liberality on the part of their owner, and make good use of these valuable animals.

Some of the mares in this stud we are confident would also prove admirable roadsters, particularly Jemima Wilkinson, Magpie, and Ornament. We trust that the lovers of the turf will not think we are undervaluing the thorough-breds by such observations, as it is well known that we are a *strict utilitarian*, and no sportsman; and yet we will yield to none in admiration of the horse, and to show that we are not niggardly in our praise, we ask what can be finer than Fairy, by Henry, and her pretty yearling filly?

The Mansion.—The grounds attached to the mansion consist of about 200 acres, and are a part as before observed, of the solid body of the farm. A high stone wall handsomely faced on both sides, capped and pointed, encloses this part of the domain in front for some distance along the road, and on the division line. The approach to the house is through a high iron gate, on either side of which is a handsome stone lodge in the castellated Gothic style. It stands at a suitable distance from the road, on rising ground, in the edge of a forest of 60 acres. It is quite imposing, of Grecian architecture, 130 feet front, 80 feet deep through the centre, and has a conservatory attached to it 80 feet in length, 20 high, and 20 wide. There is sufficient ground cleared up immediately about it for a flower-garden and ornamental shrubbery, and avenues are cut through the forest in various directions, in order to command views of the adjacent country, which is varied and picturesque to a wide extent around. The stables are about 20 rods from the house, and screened by a belt of the forest. They are of brick, in handsome style, and have every possible convenience of carriage, harness, and tool-house, grain-bins, hay-lofts, stalls, racks, feeding-troughs, and water; indeed, we think them as well as one of the farm barns, excellent models which would be well worth studying by any one desirous of building. We have certainly seen nothing more complete or convenient abroad; and yet all is done with due regard to the cost.

Kitchen Garden.—This is in front of the stables, contains about 2 acres, and is laid out in convenient squares, with turf walks. We think these much cleaner and better than gravel, and noticed that they were becoming quite common in England, especially in heavy soils. Mr. Gibbons is paying much attention to fruit, and his espaliers struck us as particularly healthy and thriving. He cultivates the strawberry in a different manner than we have ever before seen it. The soil being sandy, it is subject to drought and burning. His object is to obtain coolness and moisture. After properly preparing the beds, he leaves at every length of the bricks, and three widths of them, an open space of three inches square for the plant, which makes them stand in the bed 9 inches by 14 apart. The vines as they grow spread over the whole surface of brick, and the heat radiating from these ripens the fruit quicker and makes it sweeter than when grown on the ground; added to this, it is kept perfectly clean, and does not require washing when prepared for the table. Water greatly injures the flavor of the strawberry.

Mr. Gibbons has this year commenced an experiment with the gooseberry, with the view of preventing the mildew. He has planted the shrubs along the north side of a tight board-fence to which espaliers are trained, so that the sun can not shine upon them till past 2 o'clock. As the gooseberry perfects itself in the cool cloudy climate of England, it is reasonable to suppose that as much hot sun as we have in our own country must prove injurious to it. The finest gooseberries we have seen in the United States grew in a cold clay soil, on the banks of the Niagara river, at the foot of Lake Erie, where the summer climate is delightfully cool, and more moist than in the eastern sections of the country.

In improving his large landed property, introducing fine stock on to it, and extensive building, Mr. Gibbons is doing great good in his neighborhood, and his example is worthy of all praise. In our visit to his farm, we had noted many other things of which it was our purpose to speak; but the length to which we have already extended this article, admonishes us to draw it to a close.

Such part of Morris county as we saw we were highly pleased with; we found it, generally, under a high state of cultivation, and many creditable farms in it. Among other things there, considerable attention is paid to the culture of the peach, and indeed most species of northern fruits, this city being an excellent market for all such things.

CULTURE OF THE FIELD-BEAN.

It has often been a matter of regret with us that the common field white bean is not more extensively cultivated, especially in the eastern states. It produces bountifully, and pays better for the labor bestowed upon it than any other crop on light poor soils. Baked or boiled it is a favorite dish at the table; it is also most excellent feed for stock, especially sheep. We estimate this humble little vegetable highly; and if the following hints serve in the least to extend its culture, we shall feel amply repaid for writing this article.

Soil.—The bean will grow well in any soil, from the stiffest clay to the loosest sand; but in our experience of its culture we have found that of a light gravel, abounding somewhat with stone, suit it

best. In a clay soil the bean does not ripen so well or show so pure a white, and it is somewhat subject to mould and rot; in rich loams it runs too much to vine; and in light shifting sands its growth is small and somewhat parched.

PREPARATION.—We are supposing the soil a hard poor gravel: in this case it is customary to plow about 3 inches deep; but as the bean sends out innumerable fine roots from its main stem, it is important to have the ground loose and mellow to a greater depth, and yet keep the most fertile part of it on the top. If, then, the labor can be spared, and it be not too expensive, we would recommend that the surface-plow be followed by the smaller kind of subsoil-plow, stirring the ground 6 inches deeper, thus making the two plowings at least 9 inches in depth.

MANURE.—A very favorite manure for a bean crop in some parts of Massachusetts is chip-dung; but composts of most any kind answer very well, especially those in which muck predominates. Lime, ashes, charcoal, and plaster, are more or less beneficial as a top-dressing. Long manure fresh from the barn-yard is rather too rank, and is apt to make the beans run too much to vine; but this depends something upon the soil to which it is applied. Whatever fertilizing materials, however, are made use of, if the land be very poor and rough, and it is not particularly wished to improve it for a succeeding crop, we would recommend that they should be used for manuring in the hill; otherwise be spread broadcast upon the land directly after plowing, then well incorporated with the soil by harrowing. Thus prepared, the ground should be planted as soon as possible.

SEED.—The best kind of field-bean, is of small size, plump, round, and slightly oblong in shape and of a white color. It is common in the eastern states, and one of the finest samples of it which we have seen, is now being distributed over the country by that indefatigable friend of agriculture, the Hon. H. L. Ellsworth, Commissioner of the Patent Office.

PLANTING.—For this purpose, some prefer throwing the field into ridges; but this should only be resorted to when the soil is stiff, or possesses a superabundant moisture; in every other case, planting on a level surface is best. Drills 2½ to 3 feet apart is the favorite method of planting with those who are desirous of making the most of their ground; hills 2½ to 3 feet distant each way answer nearly as well; some sow broad-cast, but when this is done, no after-culture can follow, and the crop is liable to be lessened by the growth of weeds, and the land is left in a foul state. Beans are frequently grown among corn, being planted between each hill at the second time of hoeing. The crop under these circumstances is small; it takes also from that of the corn, and it may be considered upon the whole, as scarcely paying for the extra trouble of culture. It is customary to plant beans after corn and potatoes are got in. The first week in June is quite early enough in this climate, farther north the last of May is perhaps better: it grows quick, and we have seen first rate crops gathered from plantings as late as the 15th of June, in the latitude of 42°. The quantity of seed usually allowed per acre, in hills, is one bushel; in drills, it would require a little more; broad-cast, at least two bushels. Yet this will depend something upon the size of the bean used, and the economy in dropping the seed. Six to seven beans should be dropped in each hill, and four or five stocks be left to bear; in drills drop the seed every two or three inches, and leave a plant every four to six inches. When planted in hills, the field may be checked out by a light one-horse plow as for corn, then drop the seed by hand, and cover with a hoe or shovel-plow; for drills run the plow about two inches deep, then drop as above, or from a long necked bottle, or a tin cup with a hole in the bottom and a handle attached to it, slightly shaking the cup or bottle as the person dropping walks along. Children are best for this kind of work, as they are not obliged to stoop as much as men, and they will do it quite as rapidly and well. After dropping cover about two inches deep with the hoe, or turn back the furrow with the plow. When this is finished, it is best to pass a light roller over the ground. For drill-planting, there are various machines which answer as well for beans as for corn, but in stony ground, or a stiff soil, they do not cover well.

AFTER-CULTURE.—This is very simple, and only requires the cultivator to be passed up and down the rows at two or three different times during the season, for the purpose of keeping the weeds down and stirring the earth, followed by a slight hilling with the hoe or a light plow, throwing the dirt to the plants.

HARVESTING.—This should be done in dry weather as soon as the bean is well formed, and there is no danger of its moulding or shrinking; if left till touched by a hard frost, the pods are liable to crack open, and much waste ensues from their shelling. When sown broad-cast on smooth land, the most rapid way of harvesting is by mowing; when in hills or drills, especially in rough ground, it is customary to pull the vines by hand, which being light work, and demanding a good deal of stooping, may also, like the dropping of the seed, be performed by children. As the bean-vines are pulled they are thrown into small heaps, and sunned daily like hay. As soon as sufficiently dry, they should be taken to the barn, thrashed, and the straw stacked. We have never found it answer to stack beans before being thrashed; they have invariably become dark-colored or spotted, and in addition to this, we lost more or less by rot and mould. Mr. Solon Robinson, Vol. VIII. of the Cultivator, recommends the following method of curing beans on a clay soil in Indiana:—

"Take poles or stakes (common fence-stakes) into your bean-field, and set them stiff in the ground, at convenient distances apart, which experience will soon show you, and put a few sticks or stones around for a bottom, and then, as you pull an arm-full, take them to the stakes, and lay them around, the roots always to the stake, as high as you can reach, and tie the top course with a string, or a little straw, to prevent them from being blown off, and you will never complain again, that you can not raise beans, because they are too troublesome to save."

When situated something like Mr. Robinson, we have tried the plan recommended by him, and approve of it. Where there were no stones at hand we used small chunks of wood in their place. In the more stony and silicious soils of the east, the stakes, &c., are unnecessary, beans will cure well enough on the bare ground. After being thrashed, the beans should be cleaned in the same manner that grain is, and then put into barrels or sacks and sent to market. The whiter they are in color, and the neater they appear, the quicker they sell, and the higher the price they bring.

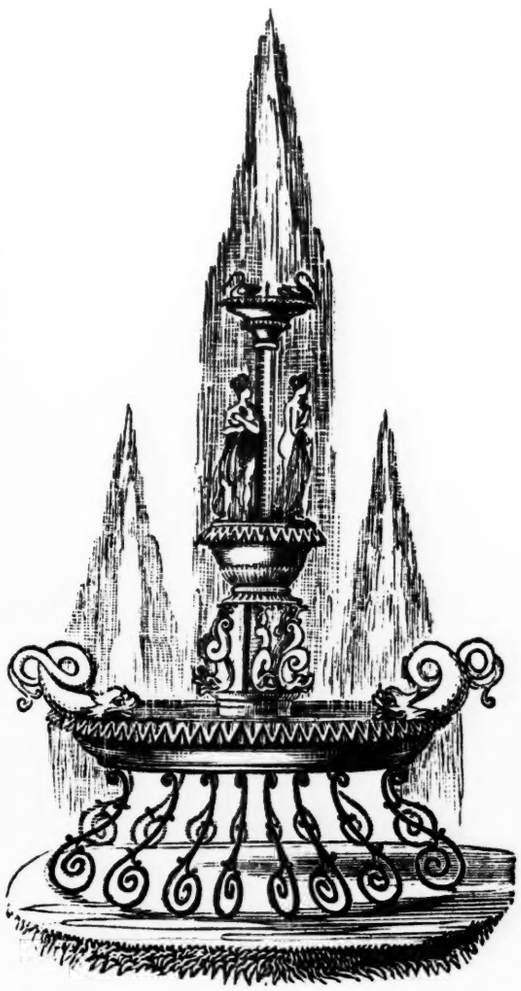
PRODUCT.—This varies greatly according to soil and cultivation. When planted with corn, 7 to 12 bushels is a fair yield per acre; when planted alone, 20 to 25 bushels. We are persuaded that, by subsoiling even the poorest gravel land, and only lightly top-dressing it with the proper kind of manure, from 30 to 35 bushels per acre may be counted upon as an average; and if so, beans would be a much more profitable crop than anything else which could be produced from it. The highest product which we have known taken from a single acre was 53 bushels, but we have heard of 60 bushels being raised.

VALUE.—White beans of a good quality, well cleaned, and neatly put up, usually bring from $1,00 to $1,75 per bushel in this market; and occasionally they are worth from $2,00 to $2,50. We do not recollect of their being less than $1,00 for years. The straw is valuable as food for sheep, and when properly cured they eat it with avidity. In a chemical analysis of beans, it is found they abound with a *greater quantity* of the *elements* of *wool* than any other grain or vegetable; to make sheep produce heavy fleeces, they are therefore particularly desirable as food, and such is their natural fondness for them, that they will eat them with avidity, whole or ground, even in a damaged state. To our store-flocks during the winter season we generally gave a pint of beans per head per day, and when we had not these, we fed peas, oats, and potatoes. Corn is good for *fatting* sheep, but not so valuable as beans, peas, oats, and most other kinds of grain, for the production of wool.

DEATH OF WILLIS GAYLORD, ESQ.

IT is with unfeigned regret, that we learn of the sudden death of Mr. Gaylord on the 27th March, at his residence, Limerock Farm, Onondaga county, after an illness of only 33 hours. Mr. Gaylord has long been known to the public through his agricultural and other writings, and as the senior editor of the Genesee Farmer, and since Judge Buel's death, of the Albany Cultivator. He is a great loss to the agricultural community, and his place can not be easily supplied. We learn that he was constitutionally delicate in his health, and has long been an invalid; but his demise in the flower of his age, notwithstanding this, was very unexpected, and has strongly awoke the sympathy of the public mind. We hoped to have been able to give a brief biography of Mr. Gaylord in this number of our journal, but understand a relative has taken possession of all his papers with a view of bringing it out in full himself, till which time the public must look to other sources for it.

A FOUNTAIN. FIG. 27.



SINCE the introduction of Croton water into New York, the city has been ornamented with several public fountains, an engraving and description of one of which, throwing the water over 60 feet high, we gave in our 2d vol., page 8. In the front and rear yards of many of the private houses, fountains are also introduced, which are not only ornamental to the city, but conducive to the pleasures and health of its inhabitants. We give, above, a cut of one of this description which we think quite pretty. It is of cast-iron entirely, and manufactured by D. L. Farnam, at 247 Water street.

MANURE OF FOWLS.—We regret to see so little attention paid to the saving of pigeon and hen-dung. The manure of any kind of birds is extremely valuable, especially for growing melons, or indeed vine-crops of any kind. Cucumbers, squash, pumpkins, and especially melons, grown from hen or pigeon-dung, are said to be sweeter and more delicate than those produced from any other kind of manure whatever. Guano, for this reason, is very valuable for manuring vines.

AGRICULTURAL ERRORS.

An Essay read before the Natural History Department of the Brooklyn Institute, March 6th, 1844.

In the early development of a new science or in the recent application of an established science to any new art, terms are used and notions entertained by its votaries, which retard its progress and must be swept away before any permanent improvement can be made, or any general benefit be derived by its application.

It is but a few years since the science of chemistry was applied to agriculture, and its progress has already been much retarded by the introduction of crude notions and indefinite terms. Not long since all their talk was of *humus*. I sought for an explanation from writers and speakers, but none of them had a definite idea of its meaning, every one giving a different explanation. I therefore consider it on a par with the term phlogiston, so glibly used by chemists within my recollection, that thousands talked about, but no one could clearly explain. Fortunately for the progress of that science, the *French school* swept from the board all unmeaning terms and opinions, and substituted such as were strictly scientific and readily understood by practical operators. It would tend much to the advancement of agriculture if some influential savans would undertake to make a correct nomenclature of agricultural terms, and sweep away useless notions, adopting such only as would convey to the mind definite meanings. I was led into noticing this subject by an article in the Cultivator for February of this year, where a writer in describing ammonia as found in nature merely gives two of its component parts, nitrogen and hydrogen as constituting its fertilizing power. Now it is well known that nitrogen and hydrogen afford a very minor portion of vegetable matter, only about one quarter; whereas the carbonic gas, always combined with free ammonia, furnishes it with nearly seventy-five per cent., yet the writer never mentions this important portion. Besides, too much nitrogen is destructive to vegetation, a fact well known by those who make nitrate of soda in South America, for on such soils no vegetation of any kind will grow. The same article when collected in a condensed state is used in Europe as one of their best fertilizers, at the rate of not more than 120 pounds to the acre, but when used in excess will destroy the crop. It appears when used in excess to be too stimulating. To furnish vegetation therefore with too much nitrogen, is in its operative effect like unto a man drinking too much alcohol, its stimulative power destroys life. No such effect has ever been noticed in other carbonates, even where the soil has contained over ninety per cent. of carbonated calcareous matter.

I have lately had several applications from agricultural societies for estimates of apparatus, agents and reagents for analyzing soils, and have heard much said at farmers' clubs on the same subject, but no one has suggested nor have I heard any one even hint at the utility of having an analysis of agricultural products as a leading desideratum. Now it is self-evident, that however expert an agriculturist may become in the analysis of soils and he remains ignorant of the component parts of the plant he intends to raise, that he will have acquired no knowledge that can be beneficial to him; for he will remain quite as much in the dark as before he knew anything of analysis. Some two or three years since I sent an essay to the Cultivator, offering to be one of a hundred to contribute thirty dollars each to procure an accurate analysis of such plants as are usually raised by our farmers, and proposed that tables of contents should be sent to all who wanted them. I also suggested that such analysis should be made in France, Germany, and England, with an interchange of tables among all these nations; with such tables any chemist would instantly understand what material would be required to add to a soil to raise any particular plant, either agricultural or horticultural.

The component parts of several plants have already been ascertained by analysis, and they are found to consist of from 84 to 92 per cent. of gaseous matter, and from 8 to 16 per cent. of solids. The gaseous portion is composed of carbon, oxygen, nitrogen, and hydrogen; the solid portion of fixed alkalies, silex, iron, &c. The varied properties of different vegetables are from all the various combinations of the four gases, together with the products so formed combining with the alkaline portion of the plants.

Sugar in plants is composed of oxygen, carbon, and hydrogen; oxalic acid in sorel and other plants is a compound of carbon and oxygen; malic acid in apples and other fruit, is composed of carbon, oxygen, and hydrogen; citric acid in the lemon and other fruit, is composed of carbon, oxygen, and hydrogen: the difference in all these consisting merely in the combinations varying in their proportions. Oxalates, malates, and citrates, will be formed by these acids combining with the alkaline portion of the plants. Vegetable gums are composed of carbon, hydrogen, and nitrogen; vegetable oils, of carbon, hydrogen, and oxygen. The bitter of the almond and of many other kernels, in the leaves of tree and plants, as well as in some varieties of fruit, is occasioned by the presence of cyanogen, which is composed of carbon and nitrogen, with a trace of hydrogen. This material when concentrated is a deadly poison.

Thus we perceive there is produced from four simple substances at the fiat of creative intelligence, a great variety of products, all necessary for sustaining life. I would advise our farmers, until something better offers, to persevere in the use of charcoal and lime, as these are to be obtained in any quantity and in most situations at a very trifling cost. The lime will supply carbon and oxygen to the plants during their growth, and the charcoal will take up and supply them with all the ammonia necessary to their full development without any over-supply. Charcoal will also afford to plants sufficient moisture during long droughts from its hydratic quality of saturating its pores, and from its great retentive power. It also lightens the soil, permitting the sun and air to penetrate to the roots of the plants, and letting all the rain percolate freely through it that is not required for its own saturation.

The foregoing remarks prove that agriculture, so far from being a mere business of drudgery and toil, is of all the arts known to man one of the most scientific and elevating, and that the sooner our farmers are educated up to their business the better for our country. The first and primary object should be an accurate analysis of all plants required for cultivation, including the elementary and solid portions of each variety. The second necessary step will be to issue tables of contents of all the known fertilizers, giving their component parts, and describing their effect on vegetation.

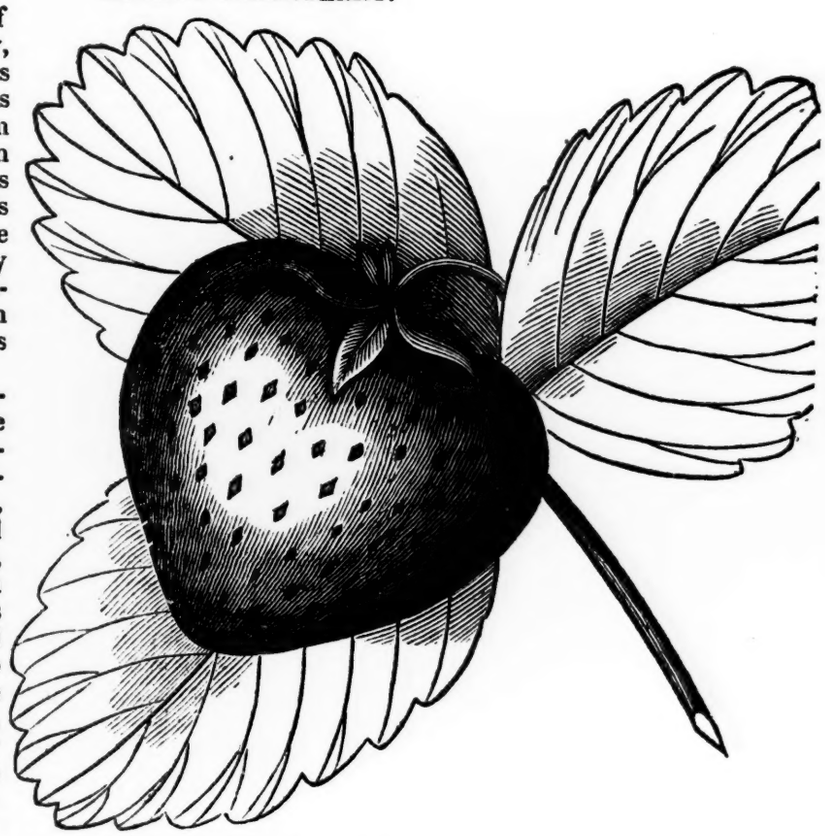
There may be some difficulty in persuading our *lawrocratic* legislature who have been educated at the expense of the farmer, to reciprocate the favor; but our farmers have only to will it, and they can command ample justice.

WM. PARTRIDGE.

HOVEY'S STRAWBERRY.

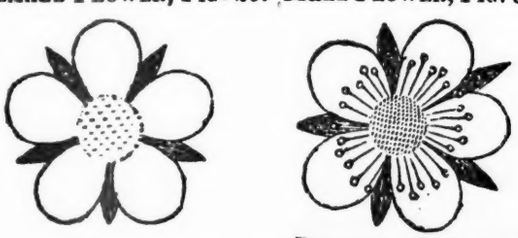
HEREWITH is a wood cut of Hovey's Seedling Strawberry, which may be depended on as perfectly exact. The leaf was transferred to the wood by an impression taken on paper from the real one. The berry was copied from that in Hovey's Magazine, and represents one of the largest size to which any have yet attained. Under ordinary cultivation many of them grow from three to four inches in circumference.

If any of your readers are desirous of seeing some of the largest size, they can be gratified by attending to the following directions. Take large, thrifty plants, first runners, and transplant them into a rich, deep soil, one foot apart each way; keep all the runners trimmed off, and the ground loose. The next season clip off all but two or three of the first blossoms on each plant, not forgetting to have a few plants of another variety (same class,) with staminate flowers, in their vicinity. To such as are not botanists, the following cuts may be of use.



HOVEY'S SEEDLING STRAWBERRY.—FIG. 28.

FEMALE FLOWER, FIG. 29. MALE FLOWER, FIG. 30.



PHILETUS PHILLIPS.

Middletown Point, April 10th, 1844.

For further particulars regarding this superb strawberry see advertisement. Its culture is rapidly spreading, and we believe that it is considered, by amateurs, the best of all the large kinds grown in the United States. Mr. Hovey's success in producing this strawberry, shows the importance of paying greater attention to seedling fruits; we do not know why we should be so dependent on foreign countries for these things.

ENORMOUS EGG.

IN the March number of your periodical under the head of Foreign Agricultural News, I noticed an account of an "enormous egg" laid by a goose in Quermore, near Lancaster, England, which measured 8¼ inches round, longitudinal circumference 10½ inches, and weighed 10 ounces. The size and weight of the goose is not stated—but I suppose she was a large one. Now, much as I am inclined to acknowledge the superiority of old England in most particulars, still, she is not the only country productive of great geese and large eggs.

Mr. Lewis G. Thurston, of Huntington, Long Island, owns a goose which laid an egg on the 4th of this month, which weighed 10½ ounces, longitudinal circumference 11¼ inches, and measured 8⅞ inches round. Let all other American geese emulate the example here set before them. S.

New York, March 16, 1844.

SHEEP HUSBANDRY.—NO. 5.

Showing how the Saxon sheep were introduced into the United States; by which means the invaluable old Merino flocks (with which the country had been providentially supplied), were materially injured, and ultimately ruined and destroyed; a misfortune of incalculable extent and importance, whereby the country sustained immense loss and damage.

OTHER avocations and duties, have caused a much longer interval of time than I intended should elapse, between my last communication and the present. In the meantime, however, I have had the gratification of seeing your pages constantly and fully occupied with agreeable and highly instructive matter, probably more interesting to many of your readers, than anything I should have discoursed, so that I have felt assured of not being much missed from among your contributors, for a few months past.

In my last paper, published in your September number, I gave some account of the original introduction into this country, from France and Spain, of that invaluable breed of animals, the MERINO sheep; undoubtedly the most valuable and profitable race of sheep for *wool*-growing purposes which this country, *or the world*, has ever seen. After having there showed how and when we *obtained* them, I promised to show in my next when and how they were *lost*; and also afterward, to point out *how* they may be certainly, speedily, and cheaply *restored* to the country, in all their former excellence.

That the original blood, *has* been *lost*, in a great degree, and *to a universal extent*, throughout the whole United States, is a *fact*, which I presume is, unfortunately, too true and too universally *felt* and admitted, to require argument, or allow of doubt. After we became (as I have shown) perfectly established, between the years 1802 and 1812, in possession of the choicest and best sort of Merino sheep, they had hardly been allowed time enough to become well *acclimated*, and adapted to their new treatment and habits in this country, (and though greatly increased and widely-spread, were by no means universally introduced,) when, about twenty years after the first importations of Merinos were made by Chancellor Livingston, and Col. Humphreys, it was whispered among us, that there existed in Germany a *choicer kind* of fine woolled sheep than the Merino—to wit, the sort denominated *Electoral Saxon*.

Let me now give a little sketch of the introduction of *Saxon* sheep. The manufacturers of *fine* cloths in this country, felt a deep interest in having the Saxony sheep introduced into the United States, so that they might be the better enabled to compete successfully, with the fine and soft cloths of the *English* and other foreign manufacturers, who were using to a great extent the exquisitely fine, soft, and silky Saxon wool, of German growth.

Under this *manufacturing* interest and influence, a small importation of Saxon sheep was made into the United States, in the year 1823. In that year Mr. Samuel Henshaw of Boston, imported *two* Saxon rams, one of which was sold to Mr. James Shepherd, who was at that time an extensive manufacturer of fine woollen cloths, at or near Northampton, Mass. It is understood that Mr. Shepherd was among the most active and influential, in procuring the earliest importations of Saxon sheep, and in encouraging and promoting the introduction and spread of that blood as far and widely as possible, throughout the United States. In the summer of the same year (1823,) and simultaneous with Mr. Henshaw's importation above-named, two rams were also imported from Saxony, by (or for) Mr. William J. Miller, a wool grower, who resided near the city of Philadelphia. I have no knowledge of any earlier importations of Saxon sheep, than those above-mentioned, and presume these were the *first*, or among the first, brought out. In the following year, (1824,) Messrs. George and Thomas Searle, merchants of Boston, Mass., imported a small vessel load of Saxon sheep; the number of sheep was somewhat less than a hundred; perhaps about eighty, in all. A portion of this importation were pretty good sheep of the kind, and were probably *pure bred*, or of *good blood*, which was more than could have been said for *all* of them. However, they *all*, including good, bad, and indifferent, *sold* well, and without much distinction as to *blood*, or as to *real* value and goodness.

The next year, (1825,) the Messrs. Searle, above-named, went *largely* into the business of importation, as did also some others, both in this country and in Germany. For a year or two, or perhaps I might say *two* or *three* years, the *speculation* in *Saxon* sheep raged almost as fiercely in our eastern cities and states as it had previously done in *Merinos*, some dozen or twenty years before. During the years 1825, '6, and '7, many vessel loads, consisting of large numbers of Saxon sheep, were imported into the United States, and landed at various ports, from Portsmouth, N. H., to Philadelphia, but greatly the largest number were landed at Boston and New York. Very few Saxon sheep were imported later than the year 1827, saving a small number brought out by German emigrants. Some of the early importations *paid well*, and were highly profitable to the importers; while others, later made, resulted in a heavy loss on the cost of importation. It was understood that the Messrs. Searle made a good deal of money, but on the whole, I doubt whether much money was made by the importers.

The speculation, or *fever*, in Saxon sheep, I think was at its height in 1825 and '26. Of a cargo sold in 1825 by public auction at Brighton, near Boston, some of the sheep brought as high as $400 to $450 each. From first to last, there were a good many *grade* or part-blood sheep brought out with the rest, and among them many miserably *bad* ones; poor, delicate, good-for-nothing animals, *without constitution*, and which could be of no possible value or use to anybody, but only serve to bring *discredit* on the *name* and race of Saxon sheep. Such, however, *sold* with the rest, and for a time brought good prices, little being then looked to, or thought of, by the excited American purchasers, beyond extreme *fineness* of fleece. The impure or *part*-blood sheep, sold as

well, and for as good prices, as the best or pure-bred, for the American buyers did not, and could not then know the difference, nor select the one from the other. The very worst lots of sheep, many of them worse than worthless, were said to have been sent out to this country as a speculation, on foreign or German account.

The sheep procured and brought out by Messrs. Searle, were generally thought to be of better blood and quality than most of the other Saxons which arrived at Boston; and though many *grade* sheep were imported by them, with and among their full bloods, as a commercial speculation, yet those gentlemen had the reputation (and I believe they *deserved* it,) of not having any hand or agency in bringing out many (if any) of the very worst sort. At all events they were believed not to have brought out *bad* sheep intentionally, nor knowingly.

The Messrs. Searle, finally, toward the close of their importations of Saxon sheep, imported, for themselves, a flock of very choice, fine ewes, together with three or four superior rams, not intended for sale, but (as I was informed,) with the laudable object and intention of "keeping up the breed" in its purity, in this country. This select breeding-flock was during many years, in the hands of Mr. Grant of Walpole, N. H., with whom, or in whose care, the Messrs. Searle placed the flock, to be bred "on shares." I understood that the flock was finally *sold* to Mr. Grant, but whether he retains it, and it still exists in its original purity of blood, I am unable to say. It undoubtedly comprised some of the very best Saxon blood, which was brought out to the United States. I was told that the fleeces from that flock, brought one year, $1,37\frac{1}{2}$ per pound; though it may be fairly presumed that the *odd cents* of that price, would come nearer expressing its market value at some periods since that day, and would perhaps have been nearly or quite as much as it would *some* years have brought in the general market; the *very finest* and most exquisite Saxon wool, not being duly appreciated nor *paid* for in this country, nor likely to be for many years to come, if ever.

Speaking of *prices* of fine Saxon wool in this country, I have now before me, a memorandum from the pen of Mr. W. J. Miller, of the *weight* and value at Philadelphia, of the fleeces of the two Saxon rams, imported by him in the summer of 1823, the same which are mentioned herein, as having been (if not the earliest,) *among* the very earliest, that were imported from Saxony. These fleeces were brought over from Germany *on* the two rams, and shorn soon after their arrival. The two fleeces after being washed, weighed together 7 pounds, (or $3\frac{1}{2}$ pounds each). It consisted as follows:—

Of 1st quality....	2 lbs. 2 oz., at $2 per lb....	$4,25
2d. ditto.....	1 lb. 8 oz., at $1,50 per lb...	2,25
3d. ditto.....	14 oz., at $1 per lb.....	0,87½
4th and 5th, do with belly-bits,	2 lbs. 8 oz., at 50 cents.....	1,25
	7 lbs. amounting to	$8,62½

thus of course, making an *average* value of about $1,23 per pound, $4,31 for each fleece.

The above statement is only valuable and interesting, as an illustration of the views *then* entertained in this country, as to the *price* or value of Saxon wool. It will serve to show or remind us at this day, of the prices per pound for Saxon wool, which were held up to the view of our American wool-growers, just at the time when the *Saxon* sheep fever was beginning to rise and rage in the United States; and will assist in explaining and *excusing* what at this day looks like the almost *inexcusable* folly and madness, that could have led our sheep-owners to sacrifice their invaluable Merino flocks, for the delicate and infinitely less valuable Saxons. Even could those high prices for the wool have been maintained, the Saxon sheep would have been nothing short of an awfully dear bargain to the country, destined as they were, to be the *instrument* of supplanting and destroying the more valuable Merino flocks.

After speaking of the select Saxon flock, which was placed by Messrs. Searle in the care of Mr. Grant of Walpole, I wish to make particular mention of another Saxon flock, of distinguished excellence, and believed to possess very strong and unquestioned claims to purity of blood. I refer to the flock of Mr. Henry D. Grove, an occasional correspondent of yours, whose contributions to your pages I wish could be more frequent. I am always highly gratified and instructed by what comes from his pen. He is a man of *worth*, as well as of intelligence, and his *merit* is only surpassed by his *modesty*. Mr. Grove is a thorough Saxon shepherd. He first came over from Germany to this country about twenty years since, (I think in the year 1824,) when quite a *young* man, in charge of one of the earliest importations of Saxon sheep made by the Messrs. Searle. He returned to Germany, and having determined to emigrate and establish himself permanently in this country, he selected a flock of choice Electoral Saxon sheep for himself, and brought them out to the United States in the years 1827 and '28, and located in the state of New York. This flock he is understood to have bred pure and with entire success, to the present time. I have said herein, that Mr. Grove is a thorough Saxon shepherd. Of this I need give no better *evidence* than *his perfect success* in raising those delicate and beautiful "hot-house plants," generally known by the name of Saxon sheep. Though so difficult a task, in the hands of most *other* persons who have tried it in this country, Mr. Grove finds in it nothing impossible or difficult. In *his* hands the Saxons *live* and thrive, as well as the hardy Merinos do in mine. He is probably the most perfect and thorough shepherd in the United States. If I was a man of wealth, and wanted to amuse myself with the ownership and care of choice and rare animals, and Saxon sheep among the rest, I would resort to no one so soon, nor with so much confidence, as to Mr. Grove, for the purchase of a little flock of his pure Saxons. But I should insist (as a part of the bargain,) on his consenting to take me for a season as his *pupil*, in order that I might note the habits of his sheep, and learn his peculiar and successful mode of care and treatment, and that I might also imbibe from him something of his practical skill

in reading their eyes and countenances, and in deciphering their looks and actions, by which he is enabled to "snuff disease" while it is yet afar off, and thus by timely care and the use of proper means, *avert* the trouble and danger while it can be *successfully* dealt with, which is usually before it would *attract the attention* of common observers, even among those who are sheep-owners, and who mean to take *good care* of their sheep.

Let us now turn back for a moment, to the period when Saxon sheep were introduced into the United States. We have seen that it was done at first, and mainly, through the interest and influence of the *manufacturers* of the fine descriptions of woollen cloths. But the manufacturers were powerfully assisted in their work, by speculators, importers, and dealers, in Saxon sheep. It became noised about, all through the country, that the *Saxon* sheep were as much *superior* to the *Merino*, as the Merino were *better* than the old white *native* sheep. Unfortunately, (though *strangely* as it *now* seems,) the people did not know any better than to believe in the grossly erroneous claims put forth in favor of Saxon sheep. So the new-comers, the *Saxons*, became, for a time, the universal favorites. The good, hardy, heavy-fleeced, profitable old Merinos, went "out of fashion," and everybody then ran after the Saxons, and got *Saxon bucks* and crossed them on their Merino flocks. Thus the best Merino flocks, which had cost so much money, and care, and trouble, were ruined and destroyed, (or nearly so,) by the cross of Saxon blood. Thus the *delicate* and *unprofitable* sort, overcame and finally drove out the *stronger* and (beyond all comparison) more valuable and *profitable* race. The Saxon cross became *universal*, or so nearly so, that throughout the whole country, there is *no known* exception. It is believed that there *is* no exception. This appears to be now the decided opinion of those who have the best and most extensive means of knowing and judging. There is plainly, *no exception* throughout the whole country, which can be clearly established and *proven*, even to the satisfaction of those who *wish* to believe it. The probabilities, are greatly against it. Of course, since the country has, as some one says, "discovered its mistake," and Saxons have fallen into general disrepute, there are *many* persons in various parts of the country who have put forth *claims* to the possession of the pure, unadulterated Merino blood. This, is the *natural* result of *demand*, and of the general call and desire, which for several years past, has been almost universal, to *get back* if possible, or *as far* and *as nearly* as possible, to the old and profitable Merino blood. It is worthy of remark, that these claims, now-a-days put forth, to the possession of pure old Merino blood, derived from the former importations, is, as a general thing, *not* made by those who would have been *most likely* to be able to make such claim, with truth; almost or quite all *such* persons whom I have met with or heard of, admit, frankly, (while they lament,) their mistake or misfortune, in having admitted or partaken the Saxon cross. But the *claims*, to present possession of the old Merino blood in its purity, now come almost or quite universally, from persons with whom it is not at all *likely* to be true, and from those, as a general thing, who are not entitled to much credit or confidence. Not but what some among them, are respectable and honest, well-meaning persons; but owing to the general carelessness, inattention, and neglect, (to say nothing of their limited means of knowledge, and their readiness to believe whatever stories are told them,) they are not likely to have any well-grounded foundation for their peculiar claims to *exemption* from the common misfortune, of having by means of the Saxon blood, or in some other way, *lost*, if indeed they ever *possessed*, the pure, unadulterated Merino blood, derived from the old importations from France and Spain.

I have been the more willing to discuss this question at the present time, because it is justly esteemed a subject of great importance, and I notice the fact that it has been to some extent latterly, a topic of animated and interesting discussion among the growers of fine wool in various parts of the country.

But the great length which this paper has already attained, admonishes me to close it abruptly; leaving some additional remarks on our present subject, to be embraced in my next communication, which I will endeavor shall not be at so great a remove from this, in point of time, as has intervened between my last previous missive to the Agriculturist, and the present. AMERICUS.

February 14th, 1844.

ON DRIVING SHEEP.

I HAVE been in the practice of purchasing and driving sheep from one portion of this state to the other for several years, and it may be useful to some of your readers to understand my method of conveying them in the cheapest, safest, and best manner.

We start them on the road as early as light appears in the eastern horizon, with an assistant before them, to prevent their rapid progress, and many unforeseen accidents which they are exposed to. It will take the most of one day to break them into a proper line of march. On the first day they will push forward several miles before they incline to eat. As soon as they will, let them commence feeding on the road-side. The man forward will take care that they do not progress but little faster than they usually do when grazing in their pastures. They will soon learn to run by one another two or three rods, then stop to feed, the forward column will frequently form a line in front, as they feed in more perfect order than many of our flood-wood companies do under military discipline. By this even management from day to day, they will keep full and not be fatigued. We generally let them rest awhile at mid-day, and secure them in a small yard about sun-down, without any expense. They are ready and convenient for their onward course early the next morning.

I have thus managed from 600 to 1,000 many times on several days' journey; they do not appear fatigued, but look full through the day. Our flocks do not fall away in flesh, but often gain on their journey. This method must look reasonable

to those who are acquainted with the nature of the sheep; while feeding about thin pastures, they are always on the move; the most active are forward, and they are no more inclined to feed nights than a drove of turkeys.

To urge them along in the winter while snow is on the ground, one person must take a few and drive on ahead, those behind will follow on; but to get them along without fatigue, they must be allowed to string along the beaten-path for a reasonable distance.

The shepherd-dog must be a valuable animal to a flock-master, in any situation, and it is a wonder that we have none of them in this sheepish state. In an especial manner when there are so many worthless animals reared among us. If any of your readers have an extra one to spare, I would give in exchange a valuable merino-ram for it; both parties could be thus mutually benefited.

SOLOMON W. JEWETT.

Weybridge, Vt., Feb. 24th, 1844.

POTATOES AND SALINE MANURES.

WE have repeatedly called the attention of our farmers to the necessity of using saline manures to a much greater extent than is now generally practised. By saline manures, we mean all those substances which enter into cultivated crops, which are called earthy or inorganic, and most of which are left in the form of ashes when these substances are burnt. Thus we find that after drying and burning potatoes, we have left of ash, the following fixed or inorganic matters in the proportions specified:—

	Potato roots.	*Potato tops.*
Potash	40.28	81.9
Soda	23.34	0.9
Lime	3.31	129.7
Magnesia	3.24	17.0
Alumina	.50	.4
Oxide of iron	.32	.2
Silica	.84	49.4
Sulphuric acid	5.40	4.2
Phosphoric acid	4.01	19.7
Chlorine	1.60	5.0

These substances are just as essential to the formation and successful growth of potatoes, as the water, atmospheric air, carbonic acid, and ammonia, which enter into their composition, and are called the organic matters,—carbon, hydrogen, oxygen, and nitrogen—which make up the balance of the materials necessary to the perfection of the plant. Now, if we apply putrescent or barnyard manures in sufficient quantity to the land, we shall furnish to the plant all that it requires for its growth, as these manures being formed from vegetables, usually contain all the required materials for the reproduction of vegetation. But there is frequently a deficiency of such manures, and farmers are obliged to resort to muck, peat, sea-weed, fish, and other animal manures, as fertilizers; and these do not afford *all* the requisite materials. To remedy this deficiency, saline manures should be used to the utmost extent that they can be found profitable.

Ashes, leached or unleached, the latter much the most profitable, should be used freely. We know of no greater waste or worse management than for our farmers to sell their ashes, as they now too generally do. No price ever paid for them is any compensation for their loss. Every bushel of good ashes will yield about 20 cents worth of potash, which, in all cases, is an essential ingredient in the farm-crops, and worth to them for this purpose, as much as to the manufacturers of potash. Yet we find the farmers trucking them off by loads, for a few bars of soap, or some other trifling equivalent, varying from 3 to 8 cents per bushel. It would be some compensation to their owners, if it were made a condition of the sale, that the ashes should be returned them after leaching, as they are then worth about half the price of the unleached for agricultural purposes. Yet in the face of these facts, perfectly well known to every intelligent farmer, there are millions of bushels, annually thrown aside in the asheries scattered through the country, especially at the west, which are used to fill up pond-holes or streets, or are suffered to be carried off by streams beyond the reach of any profitable application.

Lime is an important ingredient in soils, yielding a portion of its substance directly to plants, and especially useful in effecting changes in the constituents of the soil and preparing them in the most befitting form, and under the most advantageous circumstances, to be taken up by the growing plants.

Plaster of Paris is highly useful as a manure for plants when adapted to the soil and climate, serving both as food for plants in a large degree, and as producing changes in the available portions of soils for the benefit of the crops.

Bone-dust is a necessary food for plants, and is peculiarly adapted as a manure for potatoes and turneps, containing as it does, great proportions of phosphate of lime and gelatine, the former of which, especially, enters largely into the composition of those roots. This manure, indispensable in some shape, is now thrown away throughout most of the country, yet with the simple expense of grinding, it could be made of immense value to the farmer.

Salt is an invaluable addition to most soils, both of its materials, chlorine and soda, entering largely into plants, besides combining to a great extent with the moisture of the atmosphere, as do each of the preceding, thus securing an unusual supply of this vital material for growing plants during a drought. It is also, in common with others, an important agent in the extirpation of worms and insects, so frequently destructive of vegetation.

Saltpetre, though too expensive to be used profusely, is a valuable and economical manure when applied as a soak for seeds, which protects them from the ravages of grubs, &c., or when placed immediately around the roots of plants; giving them an early, vigorous growth, which thereby frequently secures a large crop, that might otherwise be lost by drought, or cut off by an early frost.

Nitrate and sulphate of soda, ammoniacal liquor, and some other ingredients have a similar effect, and may be used with the same advantage as the preceding.

The above applications may be extended to nearly all crops, grass, shrubbery, and fruit-trees, with the same benefit as to potatoes.

In cultivating potatoes, those varieties should be selected which give the greatest value; some of these will produce 20, 50, or in some instances even 100 per cent. more than others; but it must be remembered that quantity is not always the test of value, a rule that holds to a very great extent with roots, hay, and some of the coarser products. To such a degree does this difference reach, that Professor Johnstone asserts, that one kind of potatoes will lose 80 per cent., while another may not lose over 10 per cent. of water, a difference owing to the different soils on which they are planted, and the variety used for seed. He says, that of the three varieties used in England, known as the cups, reddons, and white-dons, the first gave three tons of starch (which is the principal test of the value of potatoes,) per acre; the white-dons gave 2½ tons; and the red-dons gave only 1½ tons. Thus the cups, although the lightest in quantity of the three varieties by three tons per acre, gave double the quantity of nutriment that the red-dons yielded. To this difference in the relative amount of starch afforded by each, is to be added the other nutritious ingredients of potatoes, gluten and oil, which vary according to the soil, manuring, and variety, to an extent even much greater than that of starch.

Now these are considerations that every intelligent farmer will not fail to consider of great weight, in determining the mode of cultivation. Potatoes, and every crop, may be made of as much more intrinsic value for any given quantity, as stall-fed beef and mutton is than light grass-fed; or corn-fattened pork is superior to the rambling, shack or slop-fed swine. These are important hints for farmers, which men of sound judgment and intelligence will not fail to appreciate and apply.

R. L. ALLEN.

Buffalo, March 26, 1844.

CHESS FROM WHEAT.

I FIND, by accidentally recurring to the late numbers of the Agriculturist, that it is quite time some of the advocates of the non-convertibility of wheat into chess, who have publicly noticed my "heresy" on this subject, should be answered. It occurred to me when I first noticed the replies to my last article, that it would be best "*to defer clearing off the side-walks till it was done snowing,*" as something of a storm was anticipated. My range of agricultural reading is for the present very limited, which is, perhaps, the reason that I have seen but three articles on the subject. But let us first see what is my position.

It is simply the suggestion that chess is the original of wheat; a suggestion founded on our ignorance of the true original of wheat, and the strong circumstantial evidence of its convertibility into chess under a variety of enumerated circumstances. I do not assert it as a settled question, I content myself with arraying some facts in support of the convertibility, which I say "if produced against a criminal on a trial for a capital offence, and *not satisfactorily explained*, would inevitably result in hanging him." Now, although I willingly concede to each of my opponents in this matter (what I have no evidence to doubt,) extended observation, candor, and intelligence; yet I must say, they have adduced neither fact nor argument to disprove my suggestion, which is at all satisfactory to me, and I may add, probably, to nine tenths of the wheat-growers of the west. The *apparent* facts are all on one side; science, they allege, is on the other. By what authority is this assertion made? and what is science?

Science is but an extended collection of facts, comprehensively and methodically arranged, illustrative of any given subject, which are the result of direct observation, or incontrovertible deductions from such observations. Anything short of this definition in its fullest import and extent, may be theory, plausible and convincing perhaps, but is not well established, scientific truth. We have had various alleged sciences, in successive ages of the world; necromancy, astrology, alchemy, and the *science* of mesmerism of the present day. Each of these, in their turn, have had large numbers of sincere and intelligent believers; yet they are not ranked by the highest and soundest intelligence of the present time, as embodying scientific truth. And who that has witnessed the slow and imperfect progress of the sciences, and the frequent unsettling of long-established, generally-acknowledged principles; and the re-formation of the whole subject—of astronomy as taught successively by the Egyptians, Grecians, Romans, and the men of genius of the middle ages; medicine, as taught by Hippocrates, Galen, and Aristotle; chemistry, as taught by its early, yet ingenious and gifted, but frequently mistaken founders, in the last century—will pretend to say, that botanical science is yet advanced so far as to place the non-convertibility of wheat into chess, in the class of *absolutely incontrovertible truths?*

And here let me say, is the precise point of difference between myself and opponents. The strong array of facts in my favor, induces the belief of the *probability* of my position. This is confidently, *absolutely* denied, under the shield of "a scientific principle;" which, after all, subsequent discoveries and further developments in botany, may prove to be *no* principle in the science.* It is a little singular then, that gentlemen of reflection should, under all the circumstances of the case, put forth their opinions with quite the confidence expressed. I was perfectly aware of the difficulty under which they labored of *proving a negative*, before I started. If they have rashly encountered the undertaking, the difficulty is with them, not me.

It is not to be denied, that a large portion of the

* Chateaubriand, in noticing some vagaries of vegetable nature in our western hemisphere, conflicting with the current observations in Europe, there enrolled as *unimpeachable science*, says, "The naturalist will perhaps contest the accuracy of this observation, for in Europe, everything which deranges our systems, is treated as ignorance or wanderings of the imagination." Montaigne says, "If nature should be pleased to reveal her secrets to us one day, what errors, what mistakes shall we find in our paltry sciences."

wheat-growers in this country, I will not say a majority of the whole, as this, although it may be true, is not a fact within my knowledge, but I may safely say a large majority of the west; men of intelligence, careful and close observers, of sound judgment, slow to form opinions, perfectly independent of popular prejudice, and arriving at conclusions exclusively from their own observations and their own reasoning therefrom; thousands of such men entertain the belief, that under a variety of circumstances, adverse to the successful growth of wheat; such as growing on wet or marshy lands, or where a scanty nourishment was afforded; when thrown out by frost in winter, or eaten off too closely by animals, wheat has turned into chess. They believe it; first, because they have seen this effect in countless instances, where they had every reason to believe that not a particle of chess existed in the ground affording the crop, or was sown in the seed; second, because they think they have found (and no proof hitherto adduced is sufficient to convince them to the contrary) wheat and chess growing on stalks from the same stool, having a common root; on different heads from a common stalk; and kernels of each from the same head. It is readily conceded, that these apparent proofs do not carry the highest—absolute evidence with them; for with the decided hostility existing against this opinion, they ought to have carried the matter to a further trial, and not content themselves with the evidence thus obtained. Successive plantings from the different products, thus casually obtained, carried through several generations, under every variety of circumstance, would put the matter on a more certain and incontrovertible basis.

It is for the conclusive and authoritative settlement of such, and an infinite number of other inquiries, that we need *a national agricultural college*, where competent men can be placed, under every advantage for arriving at long-tried, well-authenticated, definite results, such as no private gentleman can afford either the time or expense of establishing. These experiments ought to be made for a succession of years with chess, highly cultivated; wheat badly cultivated; the careful cultivation of wheat and what is supposed to be chess growing from the same root, or stalk, or even head; wheat-blossoms fecundated with the pollen from chess, and chess from wheat, &c., &c. Results, from a series of such experiments, perfectly well guarded, would be entitled to universal acceptance and general belief. Until such are exhibited, I must still claim to rank among *the heretics*.

An approximation toward harmonizing the radical difference between spike-headed and panicle-bearing plants, which "P." *assumes* as a fundamentally established principle in botany, is afforded in the seven-headed wheat described in the II. Volume of the American Agriculturist, by Dr. Lyman. Varieties of this wheat have for some years been grown in this vicinity, in which this difference is still more lessened, as from the same seed, there is a great diversity of product, both in the form and product of heads, the latter varying from 3 to 15 heads on a single stalk. Let me suggest to "P." that "there are more things in heaven and earth, than are dreamt of in our philosophy."

Agriculturists, botanists, or philosophers, can not prove from any conclusive experiments hitherto made on this subject, that the advocates of the convertibility of wheat into chess are wrong. We show good reason for occupying our present position. Will they be kind enough to afford us unquestionable evidences of its untenableness, before they call upon us to abandon it? I have pointed out the way in which it can be done, if it can be done at all, by any one having the means for doing it. When *fairly* and *fully subjected to this test*, I presume every gentleman of candor and intelligence, will be ready to shape his opinions in accordance with it.

"A Cayuga Farmer" in a contemporary journal, laments over the injury to good farming, my "heresy" will produce. He will banish his fears when he refers again to the article, and finds that bad farming (sowing wheat in unsuitable places and under adverse circumstances) is the sole alleged cause of transmutation. As it is facts alone we want on this subject, which it appears no one has to offer of a character sufficiently conclusive to convince his opponents, I must, with what is above briefly stated, take a final leave of the subject. R. L. ALLEN.

Buffalo, March 10, 1844.

We doubt whether the further discussion of this matter in our columns, will prove interesting to the majority of our readers, and unless some new and important facts can be adduced to sustain the arguments pro or con, we decline any further admission to articles on this subject. It is well known to most of our friends that *we* are no believers in the doctrine of transmutation, and we should demand the most irrefragable evidence to convince us that wheat, rye, or oats, can be changed to chess.

PAULAR MERINOS.—No. IV.

IN my last, I promised that you should soon hear from me again, in relation to the miscalled or spurious Paular sheep, of Messrs. Jewett, Avery, and others.

That promise, I will now redeem. You tell me that I have already, by my freedom of speech, and the boldness of my positions and opinions, offended many, and that I may chance to find ere long, that I have stirred up a hornet's nest, about my ears. Be it so. Though at first I felt a natural timidity and shrinking, at the idea of being drawn into an unpleasant public controversy, and would most gladly have avoided it; yet now that I am at home again, in winter quarters, and have, (as the saying is,) "got my hand in" a little, I can only say that if they want "a good set to" or for that matter, a winter's campaign, let them now come on. In the poet's words, "come one, come all." "Lay on Macduff, and damned be he who *first* cries, hold, enough."

But who are these threatening and truculent

looking personages, who have been so disturbed by my former remarks in your columns? So far as I can understand it, they are, without exception, *interested* persons, i. e. *ram*-raisers, and ram-sellers, who are fearful lest their "occupation will be gone," or at least be rendered *less profitable*, by the exposure of these Paular humbugs. Capable and "tonguey," artful fellows, I do not doubt there are, among them, who will flutter and make some little, wordy bluster, for a time, about the matter. It would be strange, if they did not. But it will be all of no avail. They had far better be quiet, "every mother's son of them," and this Mr. Jewett and his clerical friend, the Rev. Mr. Avery, in particular; for in truth, as a quaint old author hath it, their case is "like a foul bog, the more it is stirred, the worse it smells." It will not bear probing to the bottom. In doing so, its odor does not sweeten, but savors strongly of the *pocket*, and of *speculation* on public credulity. In a word, the more the case is examined the worse it appears for them. Some among them will probably feel still worse than they now do, before we are through with the subject. If those people had known what was good for themselves, it seems to me they should have been as whist, and lain as close as quails. But you know the ancient saying, that "those whom the gods have determined to destroy, they first make mad."

I do not yet find that my remarks have offended any of the plain farmers and wool-growers, who are anxious to get at the truth. *They*, in their natural desire for improvement, were (till their eyes were opened) exposed to being misled and gulled by the *catch-pictures*, and specious statements of this clique of Paular speculators, who publish the most *taking* and effective sort of *advertisements*, which, though put forth in the form, and under the thin disguise of letters and "communications" "for the Albany Cultivator," &c., &c., are in reality, usually from the adroit pens of these very owners and dealers themselves, who of course have an *interest* in trumpeting forth the wares (sometimes little better than worthless,) which they wish to sell. The Albany Cultivator, not to speak of other publications, has long teemed, and *groaned* (at least many of its *readers* have) with such things. I used to be caught with such baits and traps, myself. But I have grown older, if not wiser since. Is it not too bad, that we subscribers to agricultural publications, should be asked to *pay* for such worthless rubbish; like the man, in the story related by Dr. Franklin, who was invited to *pay* for *heating* the poker, which he would not allow to be *used* upon himself?

But to my subject. Mr. Jewett complains in your October number, that I have spoken of his sheep as being "a very coarse *breed*." He is mistaken; for the fact is, I do not consider them, and did not *speak* of them, as being of *any* breed, at all. In repeated instances, *he* himself speaks of them as "a *breed*," "a variety," as if they *really were*, or as if he wished them *thought* to be, pure bred sheep, belonging to some particular breed. In my former remarks about *coarseness*, I spoke more particularly of his boasted *ram*, and expressed the opinion that he was "not a genuine Paular, nor a pure bred Merino, of any sort." But I would *now* take broader ground, and deny that Mr. J.'s flock is of any particular *breed* or race of Merinos. I do not believe that they, (his Paulars, so called,) are of *any* breed, in the common or proper sense of the word. I defy him to *prove* that they are. I challenge the *proof*. Come, Mr. Jewett, let us have it, so that the public may be able to judge. It is a pity that any injustice should be done your sheep, or any doubt rest on them, if their pure lineage can be shown and established. Why, Mr. Editor, I expected to have seen by this time, at least as large a quantity of affidavits, as could be contained in one of those "*milk bushels*," spoken of in your columns, not long since, by your entertaining and instructive Mississippi friend, Dr. Philips of Log Hall. However, for that matter, a *cart-load* of regular Vermont affidavits and certificates, all sworn to, in due form, before a Justice of the Peace, would not have at all surprised me. Doubtless such evidence would be satisfactory to some persons, to all for instance, who are in the habit of reading and relying upon the mass of certificates which usually accompany quack medicines. Of course every one is at liberty to judge for himself. But on *this* subject, I am free to say, it would all amount to very little, in *my* estimation. Much of it, might be honestly intended; but still it would have little if any weight with me; for the simple reason, that, in my opinion, *it could not be true*. Now I hope you will not think me obstinate in my disbelief, nor uncharitable. It is in this case, only *credulity*, that is wanting. It is with me, (I confess it,) "a foregone conclusion,"—but only because I have *previously* and long since, patiently and thoroughly examined the whole question, till I became satisfied where the truth lay, as to there being, or *not* being, any of the pure old Merinos in the hands of these ram-selling speculators; or indeed what is *more*, any of the old Merino blood, left pure and undegenerate, in the whole country.

I have before expressed my opinion on that subject, very fully, in your columns, and it is not now necessary that I should repeat it, any further than to say, that those opinions and views were not hastily formed, nor without considerable opportunity for observation and knowledge of the subject; nor were they rashly put forth; they were at least well considered, and I am now, upon more reflection, prepared to *affirm* and defend them.

Mr. Jewett assures us, in your last October No., that there is now existing in his county, "one flock of 400 pure bred Paular Merino sheep, in the possession of a son, whose father purchased, some twenty years ago, direct from the importer, and these have never been adulterated by *any other breed*." This, (*if true*,) is really an announcement worth making. You, Mr. Editor, must rejoice at it; and your wool-growing readers, I doubt not, will all, with one accord, regard it as being a most interesting fact; that is, *if it be* a fact.

To have been the occasion, the humble instrument, of eliciting and bringing out a piece of intelligence so interesting and so truly important to the public, would not only afford me much ground for satisfaction, but be conclusive evidence of the

usefulness of this discussion, and that my slight labor therein has not been in vain. But before indulging any such complacent feelings, I am bound to say, that the *truth* of this assertion of Mr. Jewett's, is not only *doubted*, but it is *entirely disbelieved*, by many large and intelligent wool-growers, residing in the same vicinity with himself, whose means of information are extensive, and whose *interests* prompt them to a rigid scrutiny of the truth of all such pretensions, as well as to a close examination of the quality and value of all the fine-wooled flocks of any importance, for a great extent of country around them. Those persons, or at least some of them, have had not only a long and familiar acquaintance with the flocks of their own *county*, but, to my certain knowledge, they have travelled great distances, both in, and *out*, of their own state of Vermont, and have ransacked the country far and wide, without success, in search of good, hardy, heavy-fleeced, *pure bred* Merinos, with which to cross and improve *their own* flocks. They assure me, that according to the best of their knowledge and belief, there is no such flock of pure bred sheep, as Mr. Jewett describes, neither in his *county*, nor in the state of Vermont, nor yet in any part of the United States, so far as their knowledge extends. They feel great curiosity and interest on this subject, and say they shall be greatly obliged, if Mr. Jewett will, through your columns, have the goodness to inform the public, of the particulars of the *location*, the name and residence of this "son of a father," whom he alleges to be the possessor of such a truly precious inheritance. I almost wonder that Mr. Jewett did not condescend to give us full particulars, in his former communication. But I trust he will now have liberality and public spirit enough to respond to this call, and furnish us the much desired information, without further loss of time. It is a duty he owes the public; for surely the fortunate owner of that invaluable *pure bred* Paular flock, must have a "local habitation and a name;" and if so, it is of much consequence to us farmers and wool-growers, that we should not be left longer in ignorance of such valuable items, which of course Mr. Jewett can have no motive for withholding. When he lets us know the whereabouts of those 400 pure Paulars, we will all go and see them, and *purchase* too, if they are "*right*," and their happy owner will consent to part with any of them.

But seriously, is it at all likely, that such a flock as Mr. J. describes, such a fountain of pure, unadulterated Paular Merino blood, would have remained to this late day, undiscovered, and unknown to *other* wool-growers in Mr. Jewett's neighborhood? It seems to me, to say the least, very improbable. I have no sort of faith in it. Not that Mr. Jewett intended to deceive us—of course not. But then *he* may *himself*, have been grossly deceived, and imposed upon in this matter, as well as in some others.

Can it be possible that in his story of the 400 Vermont Paulars, Mr. Jewett refers to the flock of Mr. Hull, of Wallingford, in that state, from whom it is understood that he purchased two or three sheep, including his boasted and pictured *ram*, the very same identical *mongrel*, which was the subject of my criticism, and whose unfounded claim to the name of Paular, was the original occasion of my remarks? If it should prove that Mr. J. did really refer to the flock of Mr. Hull of Wallingford, I presume it will be enough for this time, that I should quote the published views, of an experienced judge of sheep and wool, residing in Vermont, not far from Mr. Jewett, and who can not well be mistaken in regard to what he says on the subject in question. I have reference to Mr. Wightman Chapman, of Middlebury, Vt., who is presumed to be at least as good authority as either Mr. Jewett or Mr. Hull, or Mr. Hull's clerical coadjutor and brother-in-law, the Rev. Mr. Avery. I presume no one will question this, nor doubt Mr. Chapman's intimate and familiar knowledge in regard to wool and sheep. I quote from volume 2d, of "Transactions of the New York State Agricultural Society," for 1842, in which, Mr. Chapman says:—

"There are a great variety of other breeds of sheep here, among which are a breed from Wallingford in this state; they are sometimes called the Paular Merino, but they are *not at all similar* to the Paular Merino I have seen from the flock of Consul Jarvis, being much *larger* and *coarser*. For mutton, they are undoubtedly superior to most breeds we have here; but for *wool*, I think *inferior* to many others."

This pithy, but pertinent and valuable extract, (published with the sanction and under the auspices of the New York State Agricultural Society,) would seem precisely to hit the case of these spurious Vermont Paulars of Messrs. Jewett, Hull, and Avery; it describes them exactly, and is enough to "do up" the subject, for the present. You shall however, in due time hear further from me in regard to these matters.

EXAMINER.

New York, Dec. 8th, 1843.

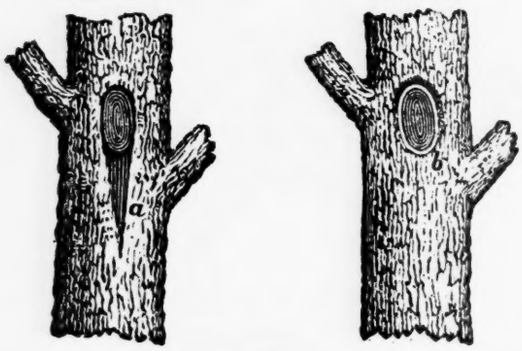
REMARKS ON PRUNING.

ALTHOUGH pruning is an operation of very general practice, its principles are but little regarded, and often great injury is done to trees by injudicious management. It is an art which can not be wholly learned from books or by lectures, but requires a well-grounded knowledge of vegetable physiology, and a strict observance of the modes of growth of the various kinds of trees. In order to execute with success this very important branch of arboriculture, it is absolutely essential to carefully observe the periods of the flow of the sap and of the appearance of the leaves; the growth of the branches, and the manner each kind is disposed to produce fruit. For, ornamental and forest trees require their heads to be regulated and balanced, so that one side may not have a disproportionate number or weight of branches to the other and those of trees which stand along the borders of cultivated fields aften require foreshortening so as to prevent their shades from injuring the crops; and in order to preserve the vigor of fruit-trees, to render them more beautiful, and to cause the fruit to be larger and better flavored, provision should always be made for a sufficient quantity of

bearing-wood duly distributed in every part of the trees and properly exposed to the air and light, and at the same time, to remove all superfluous and useless branches which tend to exhaust and cause premature decay.

The most favorable season for pruning, in general, is when the trees are in leaf and their vitality is in full action; for, in many instances, as in the oak and walnut tribes, if performed during the dormant periods of the year, an incipient decay of the surface of the wound takes place, and the bark below loses its vitality, and the wound soon becomes enlarged to a considerable extent downward, as indicated at *a*, in *fig.* 31; and in addition to the

Fig. 31. Fig. 32.



Pruning Trees.

space occupied by the branch, it exposes a portion of the surface of the stem to the action of air and moisture, which in time decays, and leads to final destruction. On the contrary, this rarely occurs in a vigorous tree that has been pruned in summer, soon after the expansion of the leaves, when the vital functions are in full activity, and the layer of alburnum or young wood has already begun to be formed, and which may be seen around the edges of the wound, as shown in *fig.* 32, by the white ring at *b*. As the season advances, the wound becomes more and more covered by the young wood, which, by the end of summer, will be so far ripened, as to protect the bark from the effects of moisture and winter frosts. The proper time for performing this operation is when the leaves have acquired one half or three fourths of their full sizes. There is another advantage, also, attending this period for pruning, in enabling the operator to free the trees from an excess of foliage, and to give proper weight and symmetry to their heads. These principles have been deduced from experience, and are strictly in accordance with the laws of vegetable physiology.

There is a prevailing opinion that, if trees be pruned when the sap is in free circulation, they will "bleed," and thereby deprive themselves of a portion of their chief food and nourishment. This "bleeding," as it is termed, can be of no essential harm to a tree, as nearly two thirds of the sap is thrown off by evaporation through the surfaces of the leaves, after having performed its most important functions, while the other third is supposed to undergo peculiar changes, and contributes to the formation of wood, bark, leaves, fruit, &c. There is also a popular notion, that when branches are taken from a tree, so many organs of waste are cut off; and it has been practically insisted upon, that by the excision of large branches, the supply of sap and nourishment which went to their support, would cause a proportionate increase of stem. The results of experience, it may be unnecessary to add, prove this opinion to be erroneous in principle, and that when a branch is cut off, a portion of nourishment to the stem is also cut off from the junction downward to the root. Every branch of a tree, of whatever size it may be, not only draws nourishment and increase of substance from the stem and its corresponding root in proportion to its size, but also supplies them in return, with a due proportion of nutriment, and by which their substance is increased; for, if an overgrown branch of a thrifty tree be pruned off, the annual increment of the diameter of the stem is found not to exceed its previous rate of growth; or, the excess, if any, is not equal to the amount of wood which had been periodically formed by the branch or branches thus separated from the stem. If the branch, whether large or small, acted merely as a drain on the vessels of the stem and root, and if the sap it derived from them were elevated to the leaves of the branch, and thence returned no farther than the origin or point of union with the stem, then the common opinion would be correct. On the contrary, however, when it is found that the existence and increase of every branch, twig, and leaf, depends on a communication with the root, and that this communication passes through the stem downward to that organ, and from it upward periodically, and, moreover, that every periodical series of new vessels thus formed in the branch, has a corresponding series of vessels found in the stem from its point of emitting the branch to the root, it is clear that a branch not only increases in substance by the functions of its own organization, but must, of necessity, periodically increase the substance or diameter of the trunk or stem.

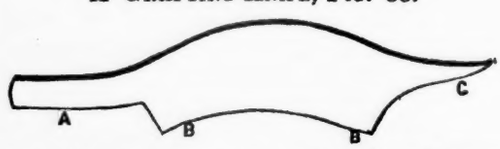
D. Jay Browne.

Read before the New York Farmers' Club, April 2, 1844.

GRAFTING-KNIFE.

As the present is the season for selecting and setting grafts, and knowing the lively interest you take in all that pertains to the fruit-garden and orchard, I send you herewith the description of a knife which I have found superior to all others, for splitting the head of the stock in performing that operation, both as to convenience and expedition. Its form will best be seen by a glance at the accompanying drawing.

A Grafting-Knife, Fig. 33.



It should be made entirely of steel, and its great advantage consists in the curved edge *b*, *b*, which instead of loosening the bark from the stock, and thereby rupturing the vessels which convey the sap, *hugs* it to the wood, and makes a clean, smooth cut.

It is used by forcing it into the stock with an or-

dinary hammer or mallet, after which the knife being loosened from the cleft the wedge, like point *c*, which should be made at least a quarter of an inch thick, is driven perpendicularly into t e centre of the stock, and serves to hold open the cleft during the operation of setting the scions.

WESTCHESTER COUNTY.

TAMING A SAVAGE BULL.

As I heard last week of a farm servant being nearly killed by a bull, and as I sometimes hear of valuable bulls being killed on account of their being too savage to be safe, I have ventured to send you a plan to prevent bulls from injuring persons or animals of any kind. But, in case you consider this plan of too trivial a nature to be of general use, I request you will put my letter and its contents into the fire; as I have no doubt you are much troubled with useless communications.

The plan I send, I have used with perfect success, with a very savage bull I bought. Any blacksmith can make it; the cost about five shillings: and it does not cause any annoyance to the animal when he does not try to use his horns.

b is a cap screwed on the end of the horn; *a c* is an iron rod hanging on a pivot in the cap—a chain from it leads to a ring in the bull's nose. The end of the rod *a c*, at *a*, fig. 34, ought to be in a line from the root of the horn to the end of it; so that, in attempting to touch anything with his horn, the point *a* comes in contact with it, when of course the rod *a c* takes the position of one of the lines in fig. 36, *d e* or *g h*, and punishes the bull by forcing up his nose.

METHOD OF TAMING A SAVAGE BULL.

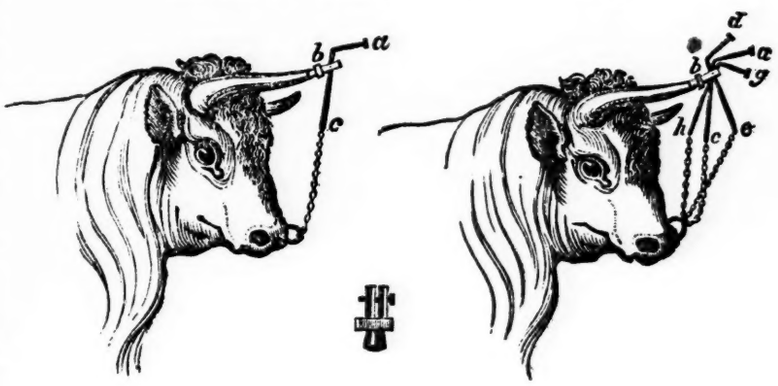


FIG. 34. FIG. 35. FIG. 36.

I turned a three-year-old savage bull with a cow that was bulling, and also turned a yearling bull with them; in a few minutes the young bull found that he was master, and punished the old one very severely: and I was shortly after able to take off the irons, and as long as I had him he never offered to hurt a person, although when I bought him he had tossed several people, and was sold to me as incurable.

ERASMUS GALTON.

Roy. Ag. Soc, Journal.

In addition to the above, we have found that suspending a thick board from the horns in front of the head, sufficiently wide to prevent the bull looking straight forward, would have the effect of taming him; wearing a heavy poke also; but the English method, on the whole, seems the safest, and is much the neatest in appearance.

PROFITS OF POULTRY.

I SHOULD be glad to see stated in your paper the profits of, and the number of eggs laid by a given number of hens for one year—how many bushels of grain they consumed—what kind of grain they were fed with—how they should be managed and treated to get the most eggs—what kinds of fowls are best to keep for eggs—which pays the best, hens kept for laying or to raise chickens—and which is the most profitable, geese or hens. If you can not answer my request upon good authority, please ask correspondents through your paper to give you an account of *actual* experiments.

H. C. M.

Miller s Place, Jan. 20th, 1844.

The Poland hen is undoubtedly the greatest layer. For some excellent articles on the breed, feed, and management of poultry, see American Agriculturist, Vol. I., page 179. Also Vol. II., pages 247, 321, and 325. Of the number of eggs, quantity of food, &c., in a year, we are unable to answer, and will be much obliged if our correspondents will reply to the inquiries of H. C. M.

NEW YORK STATE AGRICULTURAL SOCIETY.

IN presenting the list of Premiums of the New York State Agricultural Society, we submit respectfully a few observations upon them.

1. To write an "Essay on Farm Management," &c., for which a premium of $20 is offered, would require a sizeable volume. We think, therefore, that the title of this essay covers too much ground, entirely, and if properly treated at full length, would deserve a prize of $200. Would not a division of the subject into several parts be better?

2. The "Essay on Rotation of Crops." Should this not also be divided, and a separate premium given for the best rotation proper for at least four different kinds of soils, viz: the sandy, gravelly, stony, and clayey. We are not sure that primary and secondary regions should not be divided; especially, where one abounds with limestone, and the other does not. It is well known to all practical farmers, that a good rotation for a clayey soil would be a most miserable one for a sandy soil; no one, therefore, could write properly on

this subject, without making a distinction of the earthy elements on which the crops were to be grown.

3. If Ayrshire cattle are deserving a classification, should not the premiums on them be as numerous as on Durhams, Herefords, &c.? It strikes us that the crosses of any Improved Breed should be classed with Native Cattle; for, frequently, it is impossible for the owners of these animals to tell which is which, and how they are bred. In fact we can not see the propriety of talking about a *native* or *indigenous* breed—we have *none* such—all have been recently or remotely imported, and the moment we depart from *thoroughbreds*, what remain are *positive grades*, and it seems a waste of words to attempt to make any other distinction.

4. In addition to showing a handsome form and fine action, all horses ought to be tried for a single mile at least, (four would be still better,) under the saddle or in harness; and again, what weight they can draw. Where the merits of the animals were equal, those showing the best pedigree, or in other words, the most blood, should take the premium.

5. Swine ought to be divided into two breeds, large and small.

6. Premiums might very properly be given for the best Apple, Pear, Peach, and Maple-Sugar Orchards of 5 acres each or more; the best 10 acres of the more valuable kinds of timber, such as the Oak, Pine, Cedar, &c.; the best Mulberry Plantation of 5 acres; the best Garden; the best 5 acres of grass and hay each, of Timothy, Red-top, and Clover; the best acre of any new grain, root, or grass, &c., of particular value; Poultry of all kinds; Rabbits; Shepherd and Cattle-Dogs; Jacks, Jennies, and Mules; and any new valuable animal like the Alpacas for example. There are many other things for which premiums may very properly be given, when the funds of the society shall have been sufficiently increased; but the above strike us as the most important, and we close our remarks by referring to what we said on this subject, Vol. I. page 140 of this periodical.

We do hope that the regulation will be made of excluding every one from the show-yard on the first day, except the judges and such persons as they may wish to consult from time to time; for instance, any of the owners of animals or implements, &c., and such persons should leave the yard the moment the judges have got through questioning them. It is perfectly idle to suppose that the judges can do either themselves or the public justice unless this regulation be strictly enforced. The ground for the plows to operate on should also be kept clear by a strong patrol on horseback. The second day of the show, the yard should be open as heretofore to the public, at a charge of one shilling—children half price. The third day the same, when sales may take place, which under no circumstances should be by auction. The experience of both this country and Europe has settled this question, that the moment anything, *on such an occasion* is offered at auction, it puts an end to all confidence, and sales can not be effected except at the most ruinous prices. We sincerely hope, therefore, that every one will be permitted to manage his own affairs in his own private way.

If it be not presumptuous on our part, we would add further, that it would be more correct to entitle the Society's exhibitions, a "Show," and not a "Fair." A "Fair" is simply an exhibition for sales like those held in our country by benevolent societies. In England the meaning of these words is totally at variance, and are so used by all their agricultural societies. We may be deemed hypercritical, but it really seems to us to be departing from the dignity of a name, to denominate a superb "Show" like that now annually got up by the Empire State, under the title of a simple "Fair." We respectfully and earnestly crave the attention of the officers of the society to this correction; for, although a great authority has said, "a rose may *smell* as sweet by any other name," we beg leave to add, that in our humble judgment it does not *sound* as well.

Annual Exhibition of the New York State Agricultural Society, to be held at Poughkeepsie, September 18 *and* 19, 1844.

List of Premiums for 1844.

MANAGEMENT OF FARMS.

For skill and improvement in the management of a farm, taking into view the land, stock, and produce, with all the appendages.

First premium, a gold medal—Second and third, silver medals.

No premium will be awarded unless an accurate description of the farm and statement of the crops, &c., with all the expense of the management and profit of the farm, is furnished. These premiums will be awarded only to those whose farms are improved in a manner that renders them examples worthy of imitation.

ESSAYS FOR PUBLICATION IN THE "TRANSACTIONS."

For the best series of essays on the importance of scientific knowledge in prosecuting successfully the ordinary pursuits of Agriculture,.....$100

For the best essay on farm management, including all the details connected with the successful management of a farm,..... $20

For the best essay on the rotation of crops adapted to the climate of this state,..... 20

For the best essay on subsoil plowing, with the results of actual experiments in the state of New York,..... 20

For the best essay on the culture and manufacture of silk,..... 20

For the best essay on the cultivation of the apple, for exportation as well as domestic use,..... 20

EXPERIMENTS AND IMPROVEMENTS IN AGRICULTURE.

Turning under Green Crops.

For the most satisfactory experiment of turning under green crops as a manure, on not less than one acre

of land, with a detailed statement of the whole process in writing, $10—For the second best, 2 vols. Trans.

Preparation and Application of Manures.

Best experiment in the preparation and application of manures, with a detailed statement of the expense and all matters connected with it, $10.

Improvement of Agricultural Implements.

To the person who shall exhibit at the next fair, any new or improved agricultural implement of his own invention, which shall in the opinion of the committee merit a premium, a silver medal.

Proof must be given of the work performed by the implement previous to its exhibition, and of its having been used and approved by some practical farmer. To be open for competition to any citizen of the United States.

Comparative value of Crops as food for Cattle.

For the most satisfactory experiment upon a stock of cattle not less than four in number, in ascertaining the relative value of different kinds of food used, as compared with hay, with a detailed account of the fodder used, and the expense of raising and feeding the same. The experiments to be made in three winter months, or whenever satisfactory experiments can be made, $20—Second best, 2 vols. Trans.—Third best, diploma.

Experiments in Indian Corn.

A premium of $25 for the best, $15 for the second best, and $10 for the third best conducted series of experiments in the cultivation of Indian corn. Not less than one acre of ground to be planted.

The experiments to be made with a view of ascertaining what are the peculiar laws relating to that crop—particularly how thick it should be planted, how the plants should be distributed on the ground—whether in hills, drills, or otherwise, what kind of manure, and how it should be applied, the manner of cultivation, and the kind of corn planted, to be particularly stated. The cost of each process, the amount of corn raised by each of the different modes of culture, and the relative profits, to be accurately and minutely stated in the report to the committee.

Irrigation.

Best conducted experiment in the flooding and irrigation of lands, $10.

Sheep.

Best managed flocks of sheep, including particular statements of the breed, expense of keeping, increase, amount of wool, value, &c., $12, or a gold medal.

Dairy.

Best managed dairy, with a detailed statement of expense, and everything connected with the management as well as profits of the same, $12, or a gold medal.

For the greatest quantity and best quality of butter produced on any farm, from a given number of cows in 30 days the present year, with a particular statement of the method of making and preserving the same, with a satisfactory account of the manner in which the cows have been fed, and the general management of the milk and butter—a silver medal.

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CATTLE.

Class I.—*Best of any breed.*

Best bull, 3 years old, $20	Best cow, 3 years old, $20
Best bull, 2 years old, 15	Best cow, 2 years old, 15
Best yearling bull,.... 10	Best yearling cow,.... 10
Best bull calf,..... 6	Best heifer calf,..... 6

Class II.—*Durham Cattle.*

Best bull, 3 years old, $15 | Second best,.....$10
Third best, diploma.
Best bull, 2 years old, $10 | Second best,..... $5
Third best, diploma.
Best yearling bull,....$10 | Second best,..... $5
Third best, diploma.
Best bull calf,..... $5 | Best cow, 3 years old, $15
Second best,.....diploma. | Second best,.....$10
Third best, diploma.
Best heifer, 2 y'rs old, $10 | Second best,..... $5
Third best, diploma.
Best yearling heifer,..$10 | Second best,..... $5
Third best, diploma.
Best heifer calf,..... $5 | Second best,.....diploma.

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Class III.—*Herefords.*

Best bull, 3 years old, $15 | Second best, 2 vols. Trans.
Third best, diploma.
Best bull, 2 years old, $10 | Second best, 2 vols. Trans.
Third best, diploma.
Best yearling bull,.... $6 | Second best,...vol. Trans.
Third best, diploma.
Best bull calf,..... $5 | Best cow, 3 years old, $15
Second best,.....diploma. | Second best, 2 vols. Trans.
Third best, diploma.
Best heifer, 2 y'rs old, $10 | Second best, 2 vols. Trans.
Third best, diploma.
Best yearling heifer,.. $6 | Second best,...vol. Trans.
Third best, diploma.
Best heifer calf,..... $5 | Second best,.....diploma.

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Class IV.—*Devons.*

Best bull, 3 years old, $15 | Second best,.....$10
Third best, diploma.
Best bull, 2 years old, $10 | Second best,..... $5
Third best, diploma.
Best yearling bull,...$10 | Second best,..... $5
Third best, diploma.
Best bull calf,..... $5 | Second best,.....diploma.
Best cow, 3 years old, $15 | Second best,.....$10
Third best, diploma.
Best heifer, 2 y'rs old, $10 | Second best,..... $5
Third best, diploma.
Best yearling heifer,..$10 | Second best,..... $5
Third best, diploma.
Best heifer calf,..... $5 | Second best,.....diploma.

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Class V.—*Ayrshires.*

Best cow,.....$15 | Second best,.....$10

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Class VI.—*Crosses of Native and Improved.*

Best cow, 3 years old, $12	Best heifer, 2 years old, $9
Second best,..... 8	Second best,..... 6
Third best,...vol. Trans.	Third best....vol. Trans.

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Class VII.—*Native Cattle.*

Best cow, 3 years old, $12	Best heifer, 2 years old, $9
Second best,..... 8	Second best,..... 6
Third best,...vol. Trans.	Third best,...vol. Trans.

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Class VIII.—*Dairy Cows of any Breed.*

For the best dairy cow, from which shall have been produced in thirty successive days, the greatest quantity of butter—quality as well as quantity considered—which shall be exhibited at the time,.....$15
For the second best,..$10 | For the third best,...dip.

The manner of feeding the cow, the management of the milk, and the method of making the butter, with the

time it was made, the breed of the cow, if known, and the time after calving, must all be accurately stated in writing. The cow and the butter to be exhibited at the time, with certificates from the person or persons who milked, managed the cream, and prepared the butter.

Working-Oxen and Steers.

Best over 4 years old, $15 | Third best,...vol. Trans.
Second best,..... 10 | Fourth best,.....diploma.
Best 3 yoke of oxen or steers 2 years old, belonging to one person, $15.
Second best,.....$10 | Third best,.....diploma.
Best ten yoke of oxen from any one town,.....$20
Best yoke of steers, 3 years,.....$15 | Second best,.....$10 | Third best,.....diploma.

[In awarding these premiums, particular reference will be had to the matching, training, and docility of the animals, as well as their general appearance.]

Best yoke of steers, 2 years,.....$8 | Best yoke of steers, 1 year,.....$10
Second best,...vol. Trans. | Second best,.....diploma.
Third best,.....diploma.

Fat Cattle.

Best yoke,.....$20 | Second best,.....$15
Third best, $10.
Best fat ox,.....$15 | Second best,.....$10
Third best, vol. Trans.
Best fat cow or heifer, $15 | Second best,.....$10
Third best, vol. Trans.

☞ A fat ox taking a premium as one of a pair, can not compete singly for another premium.

HORSES.

Best stallion, 4 yrs. old, $20 | Best breeding mare,..$20
Second best,..... 10 | Second best,..... 10
Third best,....vol. Trans. | Third best,.....diploma.
Fourth best,.....diploma. | Best mare, 3 yrs. old, $10
Best stallion, 3 yrs. old, $15 | Second best,...vol. Trans.
Second best,..... 10 | Third best,.....diploma.
Third best,.....diploma. | Best pr. matched farm, $10
Best pair matched,...$10 | Second best,...vol. Trans.
Second best, 2 vols. Trans. | Best pr. market horses, $10
Third best,.....diploma. | Second best,...vol. Trans.
Best gelding horse,...$10—Second best,...vol. Trans.

The variety of horse which possesses size, strength, and endurance for field-labor, combined with that action which qualifies for the carriage or saddle—in short, the "horse for all work"—is probably the most profitable class which our farmers can now engage in rearing; and to such, therefore, will the preference of the society be given. Horses taking premium in pairs, can not compete singly for the premium for geldings.

SHEEP.

Class I.—*Long Woolled.*

Best buck,.....$10 | Best pen of 5 ewes,...$10
Second best,..... 5 | Second best,..... 5
Third best,.....diploma. | Third best,.....diploma.
Best pen of five lambs, $5.

Class II.—*Middle Woolled.*

Best buck,.....$10 | Best pen of 5 ewes,...$10
Second best,..... 5 | Second best,.....$5
Third best,.....diploma. | Third best,.....diploma.
Best pen of five lambs, $5.

Class III.—*Fine Woolled.*

Best buck,.....$10 | Best pen of 5 ewes,...$10
Second best,..... 5 | Second best,..... 5
Third best,.....diploma. | Third best,.....diploma.
Best pen of five lambs, $5.

Class IV.—*Fat Sheep.*

Best,.....$10 | Second best,.....$5
Third best, vol. Trans.

Applicants for the premiums on fat cattle and sheep, must furnish statements of the manner of feeding the animals, and the kind, quantity, and cost of the food.

The term "long woolled" is designed to include the Leicesters, Lincolns, Cotswolds, and all the English varieties of sheep which furnish the quality of wool suitable for combing—"middle woolled" includes the South Down, the Norfolk, Dorset, Cheviot, Native, &c.—the "fine woolled" includes the Spanish and Saxon varieties of the Merino, and some of their crosses.

SWINE.

Best boar, over 10 mo., $10 | Best sow,.....$10
Second best,..... 5 | Second best,..... 5
Third best,.....diploma. | Third best,.....diploma.
Best lot of pigs under 10 months, not less than 4 in number, $5—Second best, diploma.

In awarding premiums on hogs, reference will be had not merely to size or present condition, but that proportion between bone and meat which promises the greatest value from the least amount of feed.

FARM IMPLEMENTS,

Best plow,.....$15 | Second best,.....diploma.
Second best, silver medal. | Best drill barrow,.....$5
Third best,.....diploma. | Second best,...vol. Trans.
Best subsoil plow,....$10 | Best farm horse cart,.. 5
Best dynamometer,... 20 | Best ox-cart,..... 5
Best farm wagon,.... 10 | Best horse-rake,..... 5
Second best,...vol. Trans. | Second best,...vol. Trans.
Best half dozen hand rakes,.....diploma. | Best half dozen grass-scythes,....diploma.
Best grain cradle,.... 3 | Best half dozen cradle-scythes,....diploma.
Second best,.....diploma. | Best half dozen dung-forks.....diploma.
Best half dozen hay-forks,.....diploma. | Best threshing machine, 15
Best harrow,..... 5 | Second best,...vol. Trans.
Second best,...vol. Trans. | Third best,.....diploma.
Third best,.....diploma. | Best straw-cutter, silver medal.
Best fanning-mill, silver medal. | Second best,...vol. Trans.
Second best,...vol. Trans. | Third best,.....diploma.
Third best,.....diploma. | Best clover-machine,..$10
Best improved ox-yoke, 5 | Second best,.....diploma.
Second best,.....diploma.
Best cultivator,..... 5

Best flax and hemp-dressing machine, $10.

Articles not presenting any new and valuable improvements, will not be entitled to premiums. Implements and machines must be tested as far as possible, in the presence of the committee.

DAIRY.

BUTTER.—*Not less than 50 pounds.*

Best sample,.....$15 | Fourth best, silver medal.
Second best, silver medal. | Fifth best,... " "
Third best,... " " | Sixth best,... " "

CHEESE.—*Not less than 100 pounds.*

Best sample,.....$15 | Fourth best, silver medal.
Second best, silver medal. | Fifth best,.... " "
Third best,... " " | Sixth best,.... " "

The butter offered for premiums must be presented in butter-tubs, jars, or firkins.

The claimants for premiums must state in writing the time when it was made; the number of cows kept on the farm; the mode of keeping; the treatment of the milk and cream before churning; the mode of churning, winter and summer; the method of freeing the butter from the milk; the quantity and kind of salt used;

whether saltpetre or any other substances have been employed.

Those who present cheese for the premiums offered, must state in writing the time when it was made; the number of cows kept; whether the cheese is made from one, two, or more milkings; whether any addition is made of cream; the quantity and kind of salt used; the quantity of rennet used, and the mode of preparing it; the mode of pressure, and the treatment of cheese afterward.

MAPLE SUGAR.

Best sample, 15 lbs...$15 | Second best,....Diploma.

CORNSTALK SUGAR.

For the best experiment in the manufacture of sugar from cornstalks, from one acre of northern corn cultivated for the purpose, so as to obtain the greatest quantity of sugar, $25.

The process of manufacture and clarifying must be particularly stated in reference to the maple and cornstalk sugar.

SILK.

Best specimen manufactured,.....$15
Second best,..... 10
Third best,..... 5
Fourth best,.. vol. Trans.
Best pound reeled silk, 10
Sec. best lb. reeled silk, $5
Third best, ...diploma.
Best half bu. cocoons, 1844,..... 10
Second best,..... 5
Third best, ...diploma.

DOMESTIC MANUFACTURES.

Best woollen blankets, $5—Second, 4—Third, 3.
Best ten yards flannel, $5—Second, 4—Third 3.
Best 10 y'ds woollen cloth, $5—Second 4—Third,3.
Best woollen carpet, $5—Second, 4—Third, 3.
Best tow cloth, 15 y'ds, $1—Second, diploma.
Best 10 yards linen,$5—Second, 4—Third, 3.
Best 10 y'ds linen diaper, $5—Second, 4—Third, 3.
Best hearth-rug, $5—Second, 4—Third, 3—F'th, 2—Fifth, 1—Sixth, diploma.
Best ten yards kersey, $3—Second best, 2—Th'd, 1.
Best rag carpet, 15 y'ds, $3—Second, 2—Third, 1.
Best double carpet coverlet, $4—Sec'd, 3—Third 2—Fourth, 1.
Best pair woollen knit stockings, $2—Second, 1—Third, diploma.
Best wove woollen stockings, $2—Second, 1, Third, diploma.
Best cotton wove stockings, $2—Second, 1—Third, diploma.
Best lb. of linen sewing-thread, $2—Second, 1—Third, diploma.
Best linen woven stockings, $2—Second, 1—Third, diploma.
Best linen knit stockings, $2—Second, 1—Third, diploma.
Best knit cotton-stockings, $2—Second, 1—Third, diploma.

VEGETABLES.

For 6 best stalks Celery,.....$2
3 best h'ds cauliflower, 2
3 best heads broccoli,.. 2
12 best white table turneps,..... 1
12 best carrots,..... 1
12 best table beets,.... 1
12 best parsneps,..... 1
12 best onions,..... 1
3 best heads of cabbage, 1
12 best tomatoes,..... 1
2 best purple egg-plants,$1
Best h'f p'k Lima beans 1
Best " Windsor do. 1
Best bunch double parsley,..... 1
3 best squashes,..... 1
Largest pumpkin,..... 1
12 best ears seed corn, 1
Best half peck table potatoes, ... 2
Second best,..... 1
Best variety seedling, do. 5

Discretionary premiums will be awarded on choice garden products not enumerated above.

FRUITS.

For the greatest variety of table Apples, $5.
For the second greatest, $3 | For the third do., vol. Tr.
For the best 12 sorts, not less than three of each, $3.
Best new seedling Apple, $5.
For the greatest variety of table Pears, $3.
For the the second greatest,.....Vol. Transactions.
For the greatest variety of winter Pears,.. "
For the best twelve Quinces,..... "
For the best twelve Peaches,..... "
For the best twenty-four Plums,..... "
For the best six bunches of native Grapes, "
For the best six bunches of foreign Grapes, "

FLOWERS.

For the greatest variety and quantity, $5.
For the sec'd greatest, $3 | For the third do., vol. Tr.
For the best Floral Ornament, $5.
For the second best,...$3 | For best s'dl'g Dahlia, $3
For third do. vol. Trans. | For the second best,... 2
For the best twenty-five varieties of Dahlias, $5.
For the second best,...$3 | For third do. vol. Trans.

PLOWING MATCH.

First premium,.....$15 | Third premium,.....$10
Second premium,..... 12 | Fourth premium,..... 6
Fifth premium, diploma.

Each competitor will be required to plow one fourth of an acre of sward land in 75 minutes; the furrows not to be less than 12 inches wide and 6 deep—the plowman to drive his team.

FIELD CROPS.—(*At Winter Meeting.*)

Best crop of wheat not less than two acres, $15.
Second best,.....$10 | Third best, 2 vols. Trans.
Best two acres of spring wheat, $15.
Second best,.....$10 | Third best, 2 vols. Trans.
Best crop of Indian corn, not less than two acres, $15.
Second best,.....$10 | Third best, 2 vols. Trans.
Best crop of Barley, not less than two acres, $10.
Second best,.....$5 | Third best,...vol. Trans.
Best crop of Rye, not less than two acres, $10.
Second best,.....$5 | Third best,...vol. Trans.
Best crop of Oats, not less than two acres, $10.
Second best,.....$5 | Third best,...vol. Trans.
Best crop of Potatoes for table, not less than 1 acre, $10.
Second best,.....$5 | Third best,...vol. Trans.
Best crop of Potatoes, quantity considered, not less than one acre, $10.
Second best,.....$5 | Third best,...vol. Trans.
Best crop of Sugar Beets, not less than half an ac., $10.
Second best,.....$5 | Third best,...vol. Trans.
Best crop of Mangel Wurtzel, not less than half an acre, $10.
Second best,.....$5 | Third best,...vol. Trans.
Best crop of Ruta Baga, not less than one acre, $10.
Second best,.....$5 | Third best,...vol. Trans.
Best crop of Carrots, not less than one acre, $10.
Second best,.....$5 | Third best,...vol. Trans.
Best crop of Peas, not less than one acre, $10.
Second best,.....$5 | Third best,...vol. Trans.
Best acre of corn for fodder, sown broadcast, $5.
Best half acre of hops, $5 | Best h'f ac. of tobacco, $5
Best " " flax, 5 | Best acre of cabbage, 5
Best acre of broom-corn, $5.

Those who present claims to premiums for farm crops, must state in writing the following particulars: The condition of the soil at the commencement of cultivation for the crop; the previous crop and cultivation, and the quantity of manure used upon it; the quantity and kind of manure the present season; the quantity and sort of seed used; the time and manner of sowing,

cleaning, and harvesting the crop; the amount of the crop determined by actual weight or measurement; and the expense of cultivation. The land shall be measured by some sworn surveyor, and the claimant of the premium, with two other persons who assisted in measuring, shall certify under oath as to the quantity produced from the piece of land mentioned in the certificate of the surveyor.

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DISCRETIONARY PREMIUMS,

Will be awarded for such implements, products, &c., not enumerated, as shall be deemed worthy of notice or encouragement.

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COMPETITION FROM OTHER STATES.

Premiums in form of silver medals, open to competition from other states, will be given

For the best bull and cow of any breed—Second best, 2 vols. Transactions.

For the best yoke of working-oxen—Second best, 2 vols. Trans.

For the best pair of fat cattle—Second best, 2 vols. Trans.

For the best pair of matched horses—Second best, 2 vols. Trans.

For the best pen of 5 fine-woolled ewes—Second best, 2 vols. Trans.

For the best fine-woolled buck—Second best, 2 vols. Trans.

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REGULATIONS.

The premiums for essays and agricultural implements, will be open to citizens of other states; all others will be confined to residents of this state, who are members of this society, or who may become so by the payment of one dollar on entering their articles.

The trial of plows will take place at Poughkeepsie, on Monday, the 16th day of September.

No premiums will be paid on any animals or articles taken away before the close of the fair.

Premiums not claimed within four months after they are awarded, will be considered as donations to the society.

All persons who intend to exhibit cattle, horses, sheep, or swine, should give notice to THOMAS L. DAVIES, Poughkeepsie, or HENRY O'REILLY, recording secretary, Albany, previous to the 10th of September, that the necessary arrangements may be made for their accommodation—and all animals must be on the ground by 9 o'clock, A. M., of the 18th September.

All those who intend to compete for the premiums on agricultural implements, butter and cheese, sugar, cocoons, silk, &c., should have their specimens on the ground on the 17th, that they may be deposited in their appropriate places, and the rooms suitably arranged on the day previous to the fair.

Applicants for premiums are requested to pay particular attention to the notes attached to the premiums on dairy cows, fat cattle, and fat sheep, butter, and cheese, field crops, maple sugar, &c.

The statements required from those who compete for field crops, must be sent to HENRY O'REILLY, recording secretary, Albany, previous to the 1st of January, 1845, and the premiums will be awarded at the annual meeting of the society, on the third Wednesday of January.

Competitors for the premiums on essays, must forward their manuscripts to the recording secretary, Albany, previous to the 1st of January, 1845, free of postage.

No premium will be awarded, unless, in the opinion of the judges of the class in which it is offered, the animal or article is worthy of such premium.

Prize-animals and implements at the previous exhibitions, will be allowed to compete for the prizes: but they must receive a higher prize, or in a different class, to entitle them to a premium. Should the same premium heretofore given them be awarded, they will receive a certificate to that effect, instead of the prize.

Animals and other articles offered for competition, must be labelled with the names and residence of the owners at full length.

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CIRCULAR.

STATE AGRICULTURAL HALL, OLD STATE HOUSE, ALBANY, FEB. 1844.—The State Agricultural Society now occupy the Hall in the old State House, contemplated by the concurrent resolutions of the last legislature. The hall is the easterly one on the first story (that formerly occupied by the comptroller)—the remainder of the edifice being occupied, as this room is yet partially occupied, by the STATE GEOLOGICAL COLLECTION.

Officers and members of county societies, and friends of agriculture from other states as well as this, are invited to visit the hall when passing through Albany; and agricultural committees of the Senate and Assembly, as well as the committees of the Society itself, will find the hall ready for their reception at their evening meetings. The returns which county societies are required by law to make to the State Society, and other communications touching the farming operations in the several counties, may be left at the hall in charge of the recording secretary; and all premiums awarded by the society, or any other claims upon it, will be paid on presentation there to the treasurer, Thomas Hillhouse.

It is the desire of the New York State Agricultural Society to maintain correspondence and exchange publications with similar societies in other states and nations; and communications are respectfully invited from practical farmers and horticulturists, and from the friends of science and art generally, in reference to any of the varied relations of agriculture in its connexion with private happiness and public prosperity.

The officers of the county agricultural societies, secretaries especially, are respectfully requested to forward to the state society information respecting the operations of those societies, and of their executive committees, together with the names and residences of officers elected; and also any newspapers containing articles calculated to promote the interests of the farming community, and to realize the expectations which influenced the legislature when passing the beneficent law of 1841 for the encouragement of agriculture. Those officers are likewise requested to call on the editors in their several counties, with a request for the publication or notice of the premium list offered by the State Agricultural Society, with the view of exciting wide-spread attention to the next annual State Fair which is to be held in Poughkeepsie, on the 18th and 19th of September. Gentlemen to whom copies of this circular are addressed, are requested to solicit an insertion in the agricultural department of the newspapers in their respective counties; and also to post a copy of it at the neighboring postoffice or in some other public place.

As it is the purpose of the State Society to carry into immediate effect the project of forming an *Agricultural Museum*—a collection that will embrace all attainable varieties of articles interesting to the farming community—the friends of agricultural improvement, many of whom have often manifested willingness to contribute to this object by the donation of suitable specimens

(and the wide range of the society renders it expedient to make the collection as comprehensive as possible,) are requested to forward their contributions as soon as practicable.

The makers of new or improved agricultural implements—the farmers and planters in this and other states who desire to disseminate information in reference to their operations in stock or grain or other agricultural products—the friends of horticulture and the domestic arts—as well as the publishers of agricultural journals in this and other states—are respectfully requested to lend their influence in promoting the purposes of the State Society, in reference to all or any of the above-mentioned projects. The owners of improved breeds of horses and cattle may also find the state agricultural hall a suitable place for exhibiting portraits of animals of the several varieties of stock.

Specimens in every department of natural history and science, will be acceptable as contributions for the agricultural museum.

Contributions of any kind, in furtherance of the specified objects, may be forwarded by the express or transportation lines direct to Albany, or may be made to either of the following officers of the society, viz: John P. Beekman, President, Kinderhook, Columbia county; James Lennox of New York; Thomas L. Davies of Dutchess; J. B. Nott, Thomas Hillhouse, or J. M'D. M'Intyre of Albany; George Vail and Alexander Walsh of Rensselaer; Henry S. Randall, Cortland; Rawson Harmon of Monroe; B. P. Johnson of Oneida; E. Kirby of Jefferson; George J. Pumpelly of Tioga; John Savage of Washington; Joel Rathbone, Luther Tucker, and Ezra P. Prentice of Albany; and the corresponding committees of the State Society, as well as the officers of the County Societies, are respectfully requested to co-operate in furtherance of this design.

The valuable collections in Natural History, resulting from the State Geological Survey, are all contained in the apartments adjoining the Agricultural Hall in the old State House: and the public generally—not merely the friends of science, but the political economists and the business men who are desirous of tracing the connexion of the geological survey with the agricultural and other industrial interests of the community—may find ample repayment for the time employed in the examination.

HENRY O'REILLY, *Recording Sec'y, Albany.*

At a meeting of the Executive Committee, in the city of Albany, on Thursday the 15th of February, 1844 —JOHN P. BEEKMAN, of Columbia, President of the State Society, in the chair:

After the usual preliminary business, the subject of causing a more general publication of the Premium List was mentioned, with a view of exciting greater attention to the State Fair next fall.

And, on motion of Mr. Vail, of Rensselaer, the recording secretary was directed to request the corresponding committees to call upon editors in their respective counties, for the purpose of procuring an insertion of that list, as a matter of general interest to the farming community.

Mr. Nott of Albany county, offered a resolution, which was adopted, directing the same officer to request the editors of agricultural and other journals, to call attention to the fact, that the premiums on agricultural implements and essays, and a certain portion of the premiums offered for horses and cattle, are *open to competition from other states.*

It was also resolved, on motion of Mr. Nott, that certain "premiums open to competition from other states," whether awarded in the form of medals or otherwise, be made equivalent to the cash premiums offered on animals confined to the state of New York—(horses and *fat* and *working* cattle being left with premiums already designated.)

Mr. McIntyre of Albany, suggested a correction, which was made accordingly, in the premium list,—providing that, in the several varieties of sheep, a pen of five ewes, instead of a single ewe, be required for the premiums offered.

Mr. Vail moved, and the motion was approved, that, whenever *age* is specified for an animal in the premium list, the term be understood as including all *over* that age.

The President called attention to the propositions for legislative aid to establish an agricultural college and pattern-farm:

And Mr. Walsh of Rensselaer county moved that a committee be appointed to consider the various propositions suggested; and to report at the next meeting of the executive committee—taking such action meanwhile as circumstances may require.

Mr. Rathbone of Albany, moved that the recording secretary be directed to communicate with the Poughkeepsie committee in reference to the reservation of suitable grounds for the plowing-match, as well as the state fair—with the view of temporarily securing several locations, from which selections may be made before the land is required for spring crops—the ground for the plowing-match to contain at least thirty acres—and to be selected, together with the ground for the fair, early in the spring, when the meeting of the executive committee may be held in Poughkeepsie, for those and other purposes.

Mr. Walsh moved that a committee of five, of which the president should be chairman, be appointed to call upon the state officers immediately, and ascertain what portion of the old State House can be assigned to the State Agricultural Society, under the concurrent resolutions of the last legislature. The committee, consisting of the President, and Messrs. Rathbone, McIntyre, Walsh, and Nott, reported during the day, that the hall on the first story, formerly occupied by the comptroller, had been designated for the future uses of the State Agricultural Society, and the recording secretary was directed to have that hall immediately arranged for the purposes of the society, and to give public notice of the fact—which direction has been complied with.

On motion of Mr. Nott, a committee of three was appointed to examine the essay accompanied by a statement of experiments made by Marcus Adams of Monroe county, in reference to the manufacture of sugar from cornstalks. [It may be proper to remark that the experiments have been made on such a scale as to enable Mr. Adams to declare that he "*sees no good reason why the manufacture of sugar may not become as universal as the raising of corn*"—inasmuch "as every neighborhood can as easily be supplied with its apparatus for making sugar as for making cider."] The committee consists of Messrs. Nott, Hillhouse, and Rathbone.

A communication was then read from the Massachusetts Society for the Promotion of Agriculture, which was addressed to James S. Wadsworth, late president of this society. The communication proffered a donation of the volumes of the "Transactions," published formerly by that society, &c.

On motion of Mr. Nott, the secretary was directed to send to the Massachusetts Society a series of volumes of Agricultural Transactions of the State of New York, together with a letter acknowledging the courtesy of

that society, and desiring a regular continuance of correspondence therewith.

It was also resolved, on motion of Mr. Nott, that copies of the "Transactions" of the New York State Agricultural Society, be sent by the same officer to the National Agricultural Society, and to all the State Agricultural Societies in the Union, with a request for exchanges from those societies.

Mr. Walsh moved, and the motion was approved, that the committee already raised in reference to certain agricultural projects before the legislature, be directed to memorialize that body for an appropriation to this society of such unclaimed quotas of money as were set apart by the law of 1841 for the promotion of agriculture.

On motion of Mr. Nott, it was ordered that the president and recording secretary be authorized to transmit copies of the "Transactions" of this society to distinguished agriculturists in other states and nations, accompanied with requests for such communications and publications as those gentlemen may think proper to furnish for promoting attention to agricultural improvements in this state.

On motion of Mr. McIntyre, the treasurer, Mr. Hillhouse, was authorized to pay all premiums and other demands against the State Agricultural Society—said demands to be presented at the hall of the society.

On motion of Mr. Walsh, the recording secretary was directed to procure suitable books, &c., for preserving the records, &c., of the society.

And on motion of Mr. Rathbone, he was also directed to procure suitable furniture for accommodating the members of the executive committee and of the society at the meetings in the Agricultural Hall.

Mr. Nott added a resolution directing the same officer to take charge of the books and other property of the society, and to make a catalogue of all the articles.

In reference to the financial affairs of the society and the arrangements for the means required for the premiums and other expenses of the next fair, some conversation occurred, in which Messrs. Walsh, Nott, Tucker, Prentice, and other gentlemen participated; when the subject was laid over till the next meeting.

On motion of Mr. Walsh, it was resolved to hold regular monthly meetings of the executive committee, on the second Thursday of each month, at 10 in the forenoon; and that the secretary notify all the members, and also request the attendance of the late members of the executive committee as far as practicable, pursuant to the resolution of Mr. Nott for inviting the ex-officers of the society to meet with the executive committee.

In reference to a communication of Mr. Bergen of Brooklyn, touching certain alleged improvements in plows, (submitted through Mr. Walsh,) Mr. Rathbone moved that the recording secretary inform Mr. B. that it will afford the society satisfaction to see the qualities of his plows tested at the next state fair in Poughkeepsie.

Mr. Walsh made some remarks on the propriety of taking measures for establishing an *Agricultural Museum and Library*, and proposed that a committee of three be appointed to aid in carrying out the project. The committee accordingly appointed, consists of Messrs. Walsh of Rensselaer, E. P. Prentice of Albany, and James Lennox of New York.

Mr. D. Lee of the Assembly, in reply to inquiries, made some observations on the nature of projects contemplated by legislative action for promoting agriculture—explaining the subjects brought before the committee of the Assembly, of which he is chairman.

The opinion was then confidently expressed by the president, Mr. Walsh, and other gentlemen, that the liberal spirit now aroused among the friends of agriculture, will promptly respond to any reasonable "conditions precedent" to legislative encouragement for promoting that essential interest of the state.

The recording secretary read several communications received from different quarters since the last meeting. He also mentioned the satisfactory results already flowing from the means employed to arouse attention to promptness and accuracy on the part of sundry county societies, from which returns had not been received quite as speedily and explicitly as they ought to have been. [The difficulties in this respect were doubtless occasioned, in some degree at least, by the changes occurring in the officers of societies about the time of the year when returns should be made—the old officers supposing that their successors would discharge the duty, and *vice versa*. The attention now turned to the matter will prevent a recurrence of the difficulties, and ensure rigid compliance with the requirements of law.]

Some discussion then ensued on the best means for realizing all reasonable expectations of the friends of agriculture, so as to justify a continuance and increase of legislative favor toward the state and county agricultural societies. The matters brought in review were laid over for further consideration at the next meeting.

On motion of Mr. Walsh, the recording secretary was ordered to publish in the agricultural journals of the state, in the state paper, and in such other papers as will devote space for the purpose, abstracts of the proceedings of this executive committee.

And then the committee adjourned till the second Thursday of March.

It is the intention of the executive committee to hold an *evening session*, after despatching the regular business of the society during the day, commencing at 10 o'clock. A. M. The evening meetings, which will be held in the Society's Hall in the Old State House, are designed chiefly for the hearing of correspondence and essays, and of remarks from friends of agriculture, whether members of the society or not. The object is to promote the cause by bringing together occasionally, for free conversation, the friends of agriculture and horticulture, including the agricultural committees of the Senate and the Assembly, and such other legislators and strangers as may be in Albany at the time of holding the meetings, &c.

HENRY O'REILLY, *Rec. Sec'y.*

SOUTHERN CALENDAR FOR MAY.

MUCH of the work for this month is influenced not only by the good management of the farmer in cleaning such portion of his crop as demands it, but by the quality of the plowing, done previous to planting.

The month of May is considered the most important of the whole year, when we take into view the cultivation of a growing crop; because much of the future labor is depending on the quality and quantity of work done now. If done well, as it should be, the crop will not become foul so soon, and if much of it be done, the husbandman will be able to receive his return so much the earlier.

The cotton plants must be cleaned out as early as possible, with the turning-plow, after the first leaves are developed. Throw the earth from the plants, leaving a portion of the bed, which must be thoroughly cleaned, whether it be covered with weeds or not. Make it your object to return to your cotton-fields as early as possible, not exceeding a week. Run around through the rows again with a bull-tongue plow, and

at the same time plow deep near the plants. A few days after plowing draw the earth around the stems with a hoe. If this second working be done early, and the plants be left in good condition, you will find much of your after-work comparatively easy. Before the end of the month, the plants will be large enough to dirt with a large shovel-plow, which should be now used, and the entire middle broken out deep and thoroughly.

Keep your corn-fields in good order, and at the second plowing, drop peas, ten to fifteen in number, between the hills of corn, so that the plow will cover them, and you will "*kill two birds with one stone.*" See that your cane-fields are kept clean; and that your tobacco-plants are not eaten by worms. If previously neglected, rice may be sown this month. As large crops, however, can not be expected from it as if planted in March or April.

When cane has grown about 18 inches high, a small quantity of earth should be drawn back to the plant; and in the course of the two succeeding dressings a bed should be formed for them five or six inches in depth. In new lands, notwithstanding the weeds, much less hoeing is done on account of the luxuriance of the cane.

Most of the winter grain that was sown in October will require cutting this month. That to be used for feeding stock should be cut just before it begins to turn yellow, and that for seed, leave until fully ripe.

Those who have bedded out their sweet potatoes, must set out the drawings every rain, having ridges or hills already prepared.

Silk-worms will have wound their cocoons from the 1st to the 20th of this month. Those you wish to reel, put in the hot sun a day or two, or place them in a close vessel, with a little gum camphor, in order to kill the chrysalides, and they can be reeled at leisure. Those intended for producing eggs for the next crop, must be selected and placed on a moist paper, in a cool dark room.

The garden is an indispensable requisite, and all that is necessary, at this season, is to keep it clean, well-stirred, or to sow occasionally endive, or cabbages for fall; radishes, lettuces, and peas, so as to give a succession of these vegetables. Keep them well watered in dry weather, and protect them by shade, if necessary.

NORTHERN CALENDAR FOR MAY.

THE whole force of the farmer will be required this month; his manure, if any remain, must all be carted out, all his land plowed, and his crops in, except some potatoes and ruta bagas. The best fresh manure for the meadow, is a well-mixed compost. All the new barn-yard manure should be scattered over the ground before plowing, and plowed under, and if any of it is too long to be turned in conveniently, let it be placed in the furrow with a fork and covered by the suceeeding furrow-slice. It is a common error to manure in the hill. This ought seldomly to be done. If the land is well pulverized, as it always ought to be, the rootlets of the plants will find their proper food, if planted within suitable distances; and instead of the manure yielding all its nutriment to the young plant, it will be thus held in reserve to be given up as required during the whole growth of the season. Corn, perhaps, is the most important crop in the United States, and is particularly deserving the farmer's attention. It is computed by Mr. Ellsworth, that the crop of 1842 exceeded 441,000,000 bushels, which is, perhaps, an overestimate. The stalks of this invaluable grain are, in many parts of the country, worth the expense of cultivation, thus leaving the whole crop of grain for profit and the use of the ground. To produce the best seed and cultivate properly, is surely, then, a great object for the farmer. A rich soil should be used, sufficiently dry, and well pulverised. Mr. Young of Kentucky, who has raised the astonishing amount of 190 *bushels of shelled corn to the acre*, says he plows his land in the fall, cross-plows it in the spring, and plants from 8 to 12 grains in each hill, at a distance of three feet apart each way; covering 6 inches deep. As soon as the corn is up, he starts a large harrow with a double team directly over the rows of corn, letting the horses walk in the adjoining furrows. A few days after, he plows with the bar next the corn. This again completely stirs the soil. He then thins to four stalks in a hill, and plows three times more. The choicest kinds of corn only ought to be used for seed, and if steeped in a strong solution of saltpetre before planting, it will protect it from crows and grubs, and give it an early and rapid start. Potatoes are a very important crop, and as they furnish so large a share of our vegetable food, it is of great consequence to get the best seed, which may be such as give a good yield, and afford a solid, mealy root, of pleasant flavor when boiled. In dry land they may be planted in furrows; if cold or wet, they should be planted on ridges. Rich land is best suited to them. Meadows should now have attention. When the waste of the barn, or house, or roads, can be led to them, they will be found to thrive very much from it. Where the meadows have been laid down long in grass, the roots should be particularly examined, and if found thin or mossy, and the sod hard, a fine compost ought to be spread on it, at the rate of eight to sixteen loads per acre; then grass-seeds of the kind required. Then harrowed with a fine, sharp-toothed harrow. Ashes are peculiarly suited to grass-land, as potash and its silicate are the principal materials of which the ground is exhausted by this crop, which are contained in them in large proportions. If herds-grass or timothy occupies the ground, it is best to omit the use of plaster. When it is desirable to promote the growth of the clovers, plaster may be sowed freely. If not before done, finish sowing hemp-seed and planting tobacco, and castor beans.

KITCHEN GARDEN.—In the fore part of this month all the early cucumbers, melons, cabbages, cauliflowers, lettuce, radishes, &c., which have been taken out of the hot-bed, removed and transplanted into the open ground. All kinds of table vegetables, as peas, beans, beets, onions, parsnips, carrots, and esculent herbs, should be sown early. Plant Lima-beans in turneps hollowed by scooping out the inside, and place them in a hot-bed, so that you may have this delicious vegetable early. Tomatoes, egg-plants, peppers, &c., can be planted out.

FRUIT-GARDEN AND ORCHARD.—All kinds of fruit and forest-trees and shrubs that have not leaved out, transplant immediately. Spring inoculating may still be performed in the early part of the month. Strawberry beds may also be planted out, and the suggestions in the calendar for April concerning pruning be observed.

FLOWER-GARDEN AND PLEASURE-GROUNDS.—The borders of the flower-garden should be finished, and perennial herbaceous plants transplanted. Sow seeds of autumnal flowers in seed-beds, to be transplanted at a future time. Set out box-edging early in the month, or it will be liable to suffer frou the drought. Trim hedges and shrubs. Give the lawns and pleasure-grounds a top-dressing of ashes or stable manure, and put the gravel walks and carriage-ways in order. This is the best month for transplanting evergreens.

AN AMERICAN HERD-BOOK.

The inconvenience arising from the want of a work of this kind is already greatly felt in the United States, and, with the rapid multiplication of our herds, is continually increasing. There may now be estimated, at least two thousand thorough-bred Short-Horn cattle on this side the Atlantic, distributed in the hands of perhaps five hundred different breeders. These animals, in most cases, have been selected from among the best herds in England, and imported at great expense! and their descendants widely disseminated into every state of our Union and the Canadas. Strict attention has been given to their breeding, and great care bestowed to maintain their original excellence. The climate and soils of America have proved congenial to their growth; and from the rapidity with which they have multiplied, and their present comparative cheapness, we may anticipate that but few further importations will be made from abroad. Still, the decided advantages conferred upon one of the most important branches of agriculture by the introduction of the Short-Horns into this country, have distinctly established them as a race to be perpetuated in their purity; and the progressive improvement in American husbandry is a sufficient guaranty that they will hereafter maintain their exalted character in elevating the standard of American cattle.

So important was it esteemed by the Short-Horn breeders of England to establish and record the lineage of their unrivalled herds, that in the year 1822, the first volume of Coate's Herd-Book was published, containing the pedigrees of over 2,500 animals; and so strongly has the public mind sanctioned the utility of the work, and its continuance, that three successive supplements have from time to time been issued, and another is now in the press, embracing altogether, a list probably of 12,000 cattle.

In the great mass of these, the American breeder has little interest; although from an absence of domestic record, many of our citizens have encountered the inconvenience and expense of transmitting a list of their herds to England for registry. A moment's reflection will convince us of the absurdity of a perpetual dependence upon foreign records for the pedigrees of American stock; and the great expense of obtaining the entire English Herd-Book, comprising five large volumes, at a cost of not less than $10, are subjects not unworthy of consideration. Add to this, the probability of errors in printing the registry at such a distance, where corrections can hardly be made, together with the possession of no greater assurance for the integrity of the records than may be found at home, and the propriety of at once establishing an American Herd-Book will be apparent.

A work of this kind has long been agitated by various gentlemen connected with cattle-breeding in America; but no one has hitherto ventured the experiment, although earnestly called for by a numerous body of breeders.

Its demand, then, being conceded, it remains to be seen whether the public will sustain an effort to accomplish it. It is a labor involving industry, research, and discrimination; and in its proper execution, demanding no ordinary degree of firmness and decision in resisting undue admissions within its pages. It may, perhaps, be deemed an act of presumption in the undersigned to assume this responsibility; but he can only answer that *some one* must undertake it, if it be undertaken at all; and having been a considerable breeder of Short-Horns for many years, and more or less conversant with most of the principal herds of this country, he considers his observation and experience, together with a familiar acquaintance with the volumes of the English Herd-Book, somewhat of a guaranty for the performance. Be it remembered however, that the task is not assumed without mature reflection, and after the repeated solicitations of several distinguished breeders in different sections of the United States; and if pursued, the co-operation of skilful and experienced individuals will be rendered. But, for the *integrity* of its execution, the undersigned will be solely responsible.

As this work is not proposed in the anticipation of private gain, so neither will it be expected to involve pecuniary loss. It is therefore necessary to ascertain the extent of encouragement which will be given to it before proceeding; and for that purpose the undersigned respectfully asks the publication of this notice by the agricultural press generally in the United States and the Canadian provinces; for which, together with a copy of the paper containing it directed to him, he will present the proprietor with a copy of the work, if prosecuted.

He also requests all who approve the plan to write him, *post paid*, if by mail, previous to the first day of July next, stating the number of animals they propose to register, together with the number of copies they will take. If a sufficient number of responses are made to encourage the undertaking, the work will proceed; if not, it will be given up. The determination of going on with it will be announced through the agricultural papers as early as September next, and those proposing to patronize the work will then be notified to forward their respective registers of cattle immediately, together with the necessary evidence of their correctness, that it may be issued as early as the spring of 1845. As it is not expected that the sales of the book will more than pay for the printing and publication, a small charge for admission will be required, say from twenty-five to fifty cents for each animal as the number may determine.

Well-executed portraits of animals, the plates being furnished by the owners, will be inserted with the register.

The *full* pedigree of each animal will be given, running back through its whole extent in the English Herd-Book, if thus furnished, together with its reference numbers, so as to render the American Herd-Book a *perfect* record of every animal's genealogy.

An index, containing the name and residence of every breeder whose cattle are registered, will be inserted. Another index will contain the name of every animal, and the page on which it is recorded.

The work will also be prefaced with a full and accurate history of the Short-Horn breed of cattle, drawn up from the best English authorities, together with a particular account of their extraordinary productions both in the dairy and at the shambles.

It will be executed, as near as possible, in the style of the English Herd-Book, well bound, and delivered to subscribers at a price not exceeding three dollars a copy, either at New York, Albany, or Buffalo, at their option.

Lewis F. Allen.

Black Rock, N. Y., April, 1844.

We can only say, that we heartily concur in the above proposition, and trust that our correspondent will meet with sufficient encouragement to prepare the work. It is high time now that we had our own national Herd-Book. The number, value, and high-breeding of Short-Horn stock eminently demand this in our country, and every year's delay of the proposed publication is a great detriment to the interests of breeders.

FOREIGN AGRICULTURAL NEWS.

By the arrival of the steamship Acadia, we are in receipt of our European journals to the 4th of April.

Markets.—*Ashes* were in fair request. *Beeswax*, large sales. *Cotton* was much depressed, and it has fallen since our last full ½*d.* to ¾*d.* per lb. *Flour* has an upward tendency. *Hides* steady. *Provisions.*—In *Beef*, *Pork*, *Bacon*, *Lard*, and *Cheese*, a fair business was doing. *Rice*, small sales. *Seeds* nominal. *Tallow* in good demand. *Naval Stores* a regular inquiry. *Tobacco*, the operations have been large, and yet the article was flat in regard to prices.

Money is still so abundant, that the project of a reduction by the British government of the Three and a Half per Cents, meets with almost universal favor.

American Stocks remain without change.

Reduction of the Duties on Rice and Tobacco in Prussia.—Our minister at the court of Prussia, Mr. Wheaton, has just concluded an important treaty with this government, reducing very considerably the duties on rice and tobacco. It is presumed that all the States of the Germanic Union of Customs will adopt it, and if so, it will have a very important bearing in favor of the interests of our southern and western planters, and cause an increased consumption abroad of these articles of American production.

Increase of Duty on Lard in France.—A bill is introduced into the Chamber of Deputies in France, to increase the duty on lard imported from the United States. We hope so illiberal a measure will not pass, for it is high time that the reciprocal increase of duties was done away with on both sides of the Atlantic.

Durham Cattle in Spain.—In an interesting article on the Agriculture of Spain, contributed by Capt. Weddington of the Navy, for the late number of the Royal Agricultural Society Journal of England, we find that the Vice Consul at Vigo, a wealthy and influential Spaniard, has introduced on to his estate a Durham bull and cow from the stock of Mr. Bates of England. His object in doing this is so to improve his herd, that he can export an improved race of live cattle to London, and thus secure remunerating prices for his animals in the Smithfield market. The estates of many of the Spanish noblemen are very large; from 100 to 800 yoke of working-cattle are frequently found upon them, besides a large number of mules. One farmer sowed last year 10,000 bushels of seed-wheat and 3,000 of barley, and during the civil war he was taxed at one contribution alone, $16,000!

Cultivation of Onions by the Tartars.—Instead of raising them from seeds, in which they do not succeed, or which appears to them too long a process, they dry and smoke in a chimney those which they wish to propagate, and in spring, when the time to plant them is arrived, they cut them diagonally into quarters, but so as not to separate the pieces entirely one from another. They set these onions in rows, when thus prepared, in good soil, well dug, but not freshly manured, at about 10 inches from each other, and two inches deep. These onions increase extraordinarily, and grow large and strong.

Improved Horses.—At the late annual meeting of the St. Austell Club, Mr. Karkeek stated his belief, that there are perhaps as many good horses now as there were 50 years ago; but the number of bad ones had greatly increased. M'Culloch had stated there were 1½ million of horses in Great Britain; and he believed he should not be far wrong in affirming that two out of every ten were not worth the food they consumed. He believed also that 8 good horses would do more work than 10 bad ones. (A member called out, "more than 20.") If by an improved system of breeding, and the introduction of better horses, they could get rid of only one horse out of 10, there would be a saving to the country, in the rearing only, of more than 2,000,000*l.* a year, reckoning the cost at 5*l.* a year; and an equal amount would be saved annually after the rearing to 3 years old, supposing the cost of keeping the horse to be 15*l.* per annum. In reply to Mr. Prater's observations, Mr. Karkeek gave it as his opinion that a two-year old filly was too young to breed from. Her powers were not properly matured. He thought they ought not to breed from a mare under three years old.

Coal Tar as Manure.—A communication was read at the Bath Agricultural Society on the subject of the value of coal tar as a manure. The writer stated that in 1840 he published his experience on the subject; he had now used it as a manure for seven years, and had never found it to fail when properly applied. By means of a water-cart he distributed over his wheat-stubble 180 gallons to the acre, allowing it to remain there two or three months in the autumn before being plowed in. Its cost was a half-penny a gallon; it was economical, and valuable for carrots, turneps, potatoes, and all roots. He had tried it on seeds, but not with equal advantage on wheat. It was very useful on a sandy loam, resting on a marl subsoil; next to that, a deep clay land was best; but its least beneficial effects had been upon soil resting on an oolite formation.

Great Durability of Oak-Timber.—Beams of the oak have recently been taken from houses in England, respectively 527, 808, and 900 years old. The beams are said to have been cut in the winter, and the bark always kept on them, which added to their preservation. Timber cut in the months of May and June, and the bark stripped off, has been found to be most durable in the climate of America.

Pheasants Destructive to Wire-worms.—No fewer than 1225 of these destructive worms were taken from the crop of a hen-pheasant in January last and this was only one day's consumption.

A good Rotation for Garden-Crops.—Celery gives a good preparation for carrots, turneps, parsneps, onions, and early cauliflowers, or for peas, with potatoes and winter-greens, or broccoli between the rows. Autumn-sown onions may be succeeded by spinach, lettuce, &c., and early cauliflower by autumn-onions. Spring-sown onions will be advantageously succeeded by cabbages in beds, with scarlet runners between; and if the cabbages stand all summer and next winter, the ground will come in, in the spring, along with broccoli-ground, from celery, potatoes, and peas, the early potatoes being planted in the trenches, and the peas sown on the ridges.

Wash for Fruit-Trees.—You constantly recommend that fruit-trees should be done over with lime as a wash. Nothing can look more frightful than their glaring conspicuous trunks on a hot summer's day; and to obviate this dissight I use cow-dung, soot, or wood-ashes, mixed up with urine, the drainage of a dung-mix, or ammoniacal-water from the gas-works, to the consistency of thin paint. This composition appears to me to possess all the advantages of the lime, and the trunks of the trees appear lessened, and altogether much more pleasing to the eye.

Sawdust as Manure.—To a large tank connected with the drain from the cattle-yard, the sawdust is carted, and after being saturated in the tank with the drainings of the dunghill for several months, it is thrown out into a heap, and a quantity of lime-shells are mixed up with it—a layer of sawdust and a layer of lime-shells alternately. The wet sawdust slakes the lime, which acts as a stimulus to decompose the sawdust without greatly charring it.

Editor's Table.

Benefit of Agricultural Societies.—In a speech before the Spartanburg Agricultural Society of Georgia, reported in the Southern Cultivator, Mr. Leitner asserts, that thousands of acres of land which were, ten years ago, thrown away and given up, to be disfigured by gullies, as worn out and valueless, are now in a high state of cultivation, and yielding to their owners far heavier crops than they were capable of when first cleared. And the very lands which six years ago would not have commanded, upon an average, five dollars per acre, could not now be purchased for ten dollars per acre; all of which, as every one acquainted with that district will say, is mainly attributable to the influence of the Monticello Planters' Society. With confidence, therefore, I recommend the formation of an Agricultural Society in our district; for just as sure as like causes produce like effects, just so sure will such a society benefit our district.

Mr. Schenck's Cow.—Mr. Knevels is informed, that we have seen animals, with thirty-one thirty-two seconds Durham blood in them, *hornless*. We should be pleased to have him inform us where cows of the "ordinary polled breed," with forms as good as Mr. Schenck's cow, can be seen, for we would like to purchase a few, and will pay a handsome price for them. Put that cow in good condition, and to our eye, she would be anything but a "raw-boned animal." In our humble opinion people generally do not sufficiently accustom themselves to judge of animals from their *anatomy*. Show them a *lean* beast, and it is *raw*-boned and *coarse*—a *fat* one, and it is *fine*, with *smooth* bones! hence the very erroneous decisions upon stock so frequently made at our agricultural shows.

Improved Cultivation of Sugar Cane.—The Planters' Banner says, that Mr. Packwood plants his cane in rows eight feet apart, instead of four or six, the usual distance. The next and most important part of his system, is, that of windrowing his cane-tops and leaves between his rows, and covering them with earth. The object in placing the cane-tops in furrows to decompose, is, of course, to supply nutriment for the succeeding crop.

Old Horses.—The Spirit of the Times says, that there is a very spirited and handsome roadster in this city that is 43 years old; that Mr. Wm. Wincoop of Catskill, has three horses with which he does the work upon his farm, whose respective ages are 36, 38, and 40, making in the aggregate 114 years; and that our best trotters have performed their greatest achievements after attaining the age of 14.

To destroy Bugs on Vines.—Dust the vines with flour of sulphur when the dew is on, and if it gets washed off by the rain, and the bugs again commence their ravages, they must be redusted.

To raise Cabbage-Heads from Stumps.—If cabbage-stumps of any variety are set out in the spring, in good order, one, two, three, or even four good sound heads will grow on them; and this they will do, year after year, until they die by accident. They are managed in the following manner: The upper, narrow-leaved sprouts, which would bear seed, are carefully rubbed off, and likewise all the lower round-leafed ones, which latter will form heads, leaving only so many of these as the strength of the soil and the stump are capable of bringing to perfection. At our cattle-show, Mr. John Drew presented several such stumps, with one to four heads of low Dutch-cabbage on each, which have borne for three years. He sets them out in earth in the cellar, in autumn; cuts off the heads when required for use, and places the stumps pretty thick in the garden in spring. The labor is trifling, the cut worm gives no trouble, and the crop sure and abundant.—*Farmers' Jour.*

Farmers, make your own Candles.—Take two pounds of alum, for every ten pounds of tallow, dissolve it in water before the tallow is put in, and then melt the tallow in the alum-water with frequent stirring, and it will clarify and harden the tallow so as to make a most beautiful article for either winter or summer use, almost as good as sperm.—*Cleveland Herald.*

To prevent Hogs and Cattle being injured in fresh Pea-fields.—The destruction of hogs and cattle, by turning them into fresh pea-fields, is not very uncommon. The remedy, however, is very simple. Stock, immediately before being turned upon a pea-field, should be watered, and at first only be permitted to remain in the field a few hours, when they should be removed to a lot, and have free access to water. After observing this precaution twice or three times, they may be permitted to remain in the pea-field constantly, without danger, if they have free access to water.—*Southern Cultivator.*

The Cotton-Plant—Its nature.—If the object were to consult the dimensions of the roots in spacing cotton to a stand, which probably has been the case heretofore, we would so arrange it that the roots would occupy all the ground; but every one knows that this defeats the object of growing cotton. Then we must resort to some other criterion by which to be governed in the adjustment of the stand and to the length of the limbs. I look with perfect confidence for the best criterion, and that it must be so spaced that the limbs will not interfere with the growth of each other. This affords free ventilation by air and light, which prevents that accumulation of damp mould always met with in crowded cotton. *It prevents rot of every sort*, and the too great division of the means of support furnished by the earth and atmosphere. Now, if my views are correct, they serve to explain the fact why cotton attains greater size in damp situations of humid atmospheres, without proportional advantages of soil, than it does in dry ones.

I have come to the conclusion that the cotton-plant is more akin in its characteristics to the tree than to any other of the vegetable kingdom; and my observations upon both (the cotton-plant and trees) induces me to believe, that the crop of cotton is more abundant always when there is space sufficient to allow of great expansion in the limbs, as the tree is more capacious, more expanded, and a more abundant bearer, where there is room sufficient. In confirmation of this position, go into an orchard of peach or apples, and you invariably find the best fruit and greatest abundance upon those trees which stand apart, with ample room to spread their branches out; and those trees which are crowded are found to have their little crop damaged by blast, mildew, and worms; and the balance of small size, even of fruit that would be large in favorable situations—it is equally so of cotton. I have known the most abundant crops of cotton made on stands that were not at the start deemed more than half sufficient. Then I would take the expansion of the limbs toward each other between the rows as the rule for distance in the drill, because in crowded cotton there are but two sides of the stalks that branch, those toward the rows, making the stalk when grown, in the shape of a fan; and it is attended with less labor in the cultivation, to allow room enough for the cotton to assume the shape of the cone—and to say the least for it, it produces as much fruit or crop. Then improve upon the ordinary method of spacing cotton, by adjusting the distance to the length of the limbs your ground will bear.—*South Western Farmer.*

Great Crops of Wheat.—Mr. Peters states in the New Genesee Farmer, that Mr. Lewis, of Alexander, raised 140 bushels of wheat, weighing 60 lbs. to the bushel, on 2 acres and 70 rods of ground, which would be at the rate of 60 bushels and 3 pecks to the acre. Gen. Harmon, in the N. Y. State Ag. Soc. Transactions 1842, says, in 1803, Mr. Sheffer, of Wheatland, harvested 40 acres of wheat which produced 62½ bushels per acre.

Mad-Itch.—I know of but one remedy for the mad-itch, and that is surgical. Open the second stomach and extract the cornstalks. This fatal disease among cattle is produced by cornstalks. The fibres being indigestible, hang in the *manifold* or *duodenum*, and irritate and inflame until the poor animal is driven to madness. Farmers feed their hogs upon green corn; the cattle follow and pick up the stalk chewed fine by the hogs, which by superior sagacity he spits out, and this ready-made article does all the mischief, and so it would serve the horses or hogs if they were to swallow it. Separate your cattle from your hogs in cornstalk chewing time, and you will separate your cattle from the mad-itch. An ounce of prevention is worth a pound of cure. Farmers, this is the remedy.

Tenn. Agriculturist.

To remove grease-spots from Merinoes, Silks, Cloth, &c.—Take the yolk of an egg entirely free from the white, mix it with a little warm water (be sure not to scald the egg), and with a soft brush apply the mixture, and rub it on the spot until the grease appears removed or loose. Wash off the egg with moderately warm water, and finally rinse off the whole with clean cold water. Should not all the grease be removed, which may arise from being on a long time, or not sufficiently washed, dry and repeat the operation.—*Southern Cult.*

Egg-Hatching by Artificial Means.—An apparatus for this purpose is now exhibiting in this city, at 160 Nassau street. It takes the egg and goes through the whole process of incubation before visiters.

A New Southern Staple.—We cut the following from the Charleston Courier: An ingenious citizen of the State of New Jersey has recently taken out a patent from the office in Washington, for a discovery which he has made which enables him to manufacture paper of various qualities, and of a very firm and strong texture, from the *cane* which grows in such abundance in the swamp lands of the southern states. The process is to remove the outer coat by a very simple chemical process, when the remainder of the cane is easily converted into a pulp of which the paper is made.

South-Down Sheep for the South.—We understand Mr. Joseph Cope, and Mr. J. Worth of Westchester, Chester county, Pa., recently sent a few of their fine South-Down sheep to South Carolina, and that they are much liked by their purchaser, and find great favor in that quarter. Mr. Cope went out to England a few years since for the express purpose of procuring superior stock, and in addition to South-Down sheep, made an importation of the superb bull Yorkshireman, from the celebrated herd of Thomas Bates, Esq., of Kirkleavington, Yorkshire, England.

To Kill Worms in Peach-Trees.—In the management of my peach-trees, I use one part of saltpetre, to about four to eight parts of common salt, and apply it in its solid state, about half a pound of this mixture to a bearing tree upon the surface of the ground, and in close connexion with the trunk of the tree. I never disturb the earth about the tree—for a long time I applied it three times in the course of the year, though twice, I now think, will answer—I have heretofore applied it in April, June, and first of September—now last of April and first of September.

Of 500 trees, 300 were treated with salt and nitre, and 200 left without its use—those around which the salt and saltpetre were put, were and still continue entirely exempt from worms—of those left without the salt and saltpetre, not one escaped the ravages of the peach-worm. LYTTLETON PHYSICK.

American Farmer.

Superiority of Cut-Hay.—Four oxen kept on cut-hay, eat 18 per cent. less than when given the uncut, and made 15 per cent. greater weight of manure, and this manure from the cut hay was thought equal to that from the uncut. THOMAS W. WARD.

Mass. Ploughman.

Preserving Corn from severe Early Frosts.—This was done in the month of June, by covering it with earth, and letting it remain for two days till the weather moderated, then uncover. It was large enough at the time for the first hoeing. S. ELLIS. *Mass. Ploughman.*

Cane-Coverer recently invented by J. P. Bryan.—If we could convince them that this instrument, in the course of the year, effects a great saving of time, labor, and money, we have no doubt but every one would immediately adopt it. We have the testimony of several sugar-planters of experience, to prove that it is all that it purports to be—that it will, with one boy and two horses, cover *ten acres of cane* per day, in as effectual a manner as the work can be performed with hoes. It is also used instead of hoes, in scraping. We saw several planters at the state fair who assure us of this fact. The instrument was thoroughly tested last spring, and Mr. Bryan now offers it to the public with the fullest confidence. It has been used by Messrs. Barker, Allain, Camp, Mather, Andrews, Col. Hickey, General Trist, and many others.—*Planters' Banner.*

Value of Sulphate of Soda.—The following account of the effect of soda as a top-dressing to beans and peas, is from Professor Johnston's celebrated work on chemical manures:

"The first dressing was applied the 4th of May, on some beans on a border in the garden; the drills that were dressed quickly took the lead of the others. There was no alteration of color, but greater strength, and it *littered wonderfully.* There were five or six stems from every seed sown, and the beans in the pods a great deal larger than the same variety undressed. It was also put upon some of the ridges of the beans in the field, and with the same effect, and gave a very large crop.

"Upon peas in the garden it appeared to add little, if anything, to the strength of the straw, but those that were dressed had a far greater number of pods, and those better filled, and the peas of a better flavor, and *it seems a valuable dressing for all leguminous crops.* When sown in the drills along with the peas, it nearly killed every one of them."

The Pork Trade of Cincinnati.—About 235,000 hogs have been packed the past season at Cincinnati, the average weight of which the Gazette estimates at 210 lbs. each. The price ranged from $2,60 to $2.70 per 100 lbs. The expense of preparing them is $2 per hog, which with the first cost, gives the sum of $1,800,000 invested in the single article of pork.

Farming in Wiskonsan.—Three brothers purchased 300 acres of prairie land in Wiskonsan, 18 months since. It cost them 10*s.* an acre, the fencing $1 an acre, and the breaking up 14*s.* an acre. Every item of expense after harvest shows an aggregate of $2,156. The 300 acres produced 6000 bushels of wheat, which sold for $3,240. This tells a good story for Wiskonsan lands. To pay for land and all improvements the first year, and have a handsome surplus left, is not common hereabouts.—*Rochester Democrat.*

American Institute Report, on the Commercial Intercourse of the United States with Great Britain, by their Committee, Messrs. Tallmadge, Chandler, and Williams, January, 1844. This is an octavo pamphlet of only 12 pages, and principally filled with statistics, and yet it is one of the most able arguments in favor of an American Tariff which we have ever read. It presents the subject in a nut-shell, and shows:

1st. That more than one third of the whole of our commerce, both in exports and imports, is carried on with Great Britain.

2d. That all the essential staple productions of this country, comprising forty-seven different articles, are taxed in Great Britain under her *new* tariff, on the market value in New York, a duty of 289 per cent.; which, in fact, make them prohibitory, except for cotton, tobacco, flour, beef, lard, and a few other articles. Under our tariff, the average rate of duties upon articles from Great Britain and Ireland, is only 32 per cent.

3d. As a specimen of Great Britain's "*free trade*" operations, she admits nothing from us *free of duty*, except specie; while we, in 1840, admitted nearly ten millions of dollars worth of different articles from her, without levying a single cent.

4th. Precisely the same system is pursued by Great Britain in favor of her shipping, especially in completely monopolizing for her own vessels, the carrying trade of all our lumber exported to her possessions.

5th. She greatly favors all colonial products by discriminating duties in their favor, and to our prejudice.

6th. The balance of trade against us with foreign countries, from 1831 to 1839, was over two hundred and thirty-five millions of dollars! No wonder that general bankruptcy and ruin should follow throughout the country.

Verily this is an Indian division of "free trade"—all "*turkey*" for foreign nations, and all "*owl*" for the United States.

The American Poulterer's Companion, by C. N. Bement.—We are glad to learn that our publishers, Messrs. Saxton & Miles, are about to issue a work with the above title. It will be highly embellished with numerous wood-cuts most of which are drawn from life. Several of these have already been submitted to our inspection, and we can vouch for their spirit and truth. We have also had the advantage of looking over the MSS. copy of the work, and will say in advance that we highly approve of its contents. Mr. Bement has paid great attention for several years to the subject of poultry, and has clearly and succinctly treated the whole matter.

The Plow-Boy, monthly, 8 pages quarto, with handsome illustrations, conducted by A. Randall, Cincinnati, Ohio—price *Twenty-Five* cents a year! Now if the people want a cheap publication here it is—let them hasten and subscribe for it by thousands. When late *Fifty* Cent papers revived again, and others recently started in this state, we foretold a powerful competition for them in that price throughout the country. Here, then, is the beginning, and they will find enough more of them before the year rolls round. Indeed, we have a great fancy to commence ourselves in this way; and if we do, it will be in a rivalry of cheapness not to be despised. Our title shall be the Penny Farmer, *One* Cent a month, or a *Shilling* a year—just the cost of a sizeable paper of smoking-tobacco! But to our subject. The first number of the Plow-Boy indicates that it will be a well-conducted paper, and worth at least ten times its subscription price. Success to it.

Great Sale of Saxony Sheep.—We beg especial attention to the advertisement of the intended sale of the late Mr. Grove's superior Saxon sheep. We have so often spoken of the pure choice breeding, and high merits of these animals, that we deem it unnecessary to add more, than that the public may depend upon them as superior to most flocks in the United States, and perhaps equal to anything in Europe.

Durham Stock for Michigan.—Mr. D. C. Collins of Hartford, Connecticut, has sold his superb Durham bull Hero, to Henry Hall, Esq., of Plainfield, Grand Rapids, Michigan, and he passed through this city on the 22d April, for the residence of his present owner. We expressed our opinion of this superior animal on page 293 of our 2d Volume.

Durham Stock for England.—Mr. Collins likewise shipped on the 17th of April, on board the packet-ship New York, for Liverpool, the Durham bull New Englander, got by Hero, above. This splendid animal is destined for Earl Spencer, and however superior this nobleman's stock may be considered, we think it will not be deteriorated by taking this American cross. We believe that New Englander is the first Durham bred in the United States, that has ever crossed the Atlantic for Great Britain. It looks something like taking coals to Newcastle, and we shall be anxious to learn John Bull's opinion of the exportation.

State Agricultural School.—A bill to incorporate this school has passed the legislature. It is a private corporation, and no appropriation of the public money is made for it.

Seeds for Distribution.—We again acknowledge ourselves under obligations to the Hon. H. L. Ellsworth of the Patent office, for various packages of improved seeds. We have distributed them among our friends for experiment.

Credit Quotations.—"Cure of Hoven in Sheep." The Boston Cultivator of 30th March copies this from us without giving credit.

"Okra Gumbo." Did the Albany Cultivator copy this article from the American Agriculturist Almanac, or did it receive it as an original communication from Mr. Affleck? If it did not, it should give the almanac credit.

Errata.—In Judge Andrews' article on Georgia Lands, page 118, column first, line first, for "only a few of the *grapes* grow well in Georgia," read "*grasses.*"

Agents.—J. J. McCaughan of Mississippi City, is appointed an agent of the American Agriculturist, and he is authorized to receive subscriptions therefor.

Acknowledgments.—To Professor Richardson, of Bethany College, for his address delivered before the Agricultural Society of Brooke and Ohio counties, Va., at its annual exhibition, October 11, 1843. The agriculture in these counties is shown to be in a very favorable state compared even with the best parts of Old Virginia.

To John L. Hunter, Esq., for his address pronounced before the Barbour County Agricultural Society, at Ewfaula, Ala., at its late anniversary in February. We here find some excellent observations on the culture of cotton, application of marl, muck, and cotton-seed as manures, and benefits of fall plowing.

To Messrs. Miller & Brown, for a Memoir on the Origin, Cultivation, and Uses of Cotton, by the Hon. Whitmarsh Seabrook, President of the State Agricultural Society of South Carolina. A most valuable pamphlet of 62 pages octavo, embodying in its history all that is essential to a knowledge of the cotton-plant.

To John D. Steele, Esq., for his address at Westchester, Pa., Oct. 1843, before the Chester and Delaware Agricultural Society, in which the value of chemistry applied to agriculture is fully shown.

To Thomas Affleck, Esq., for his Lecture on the Elements of Horticulture, at Washington, Miss., Nov., 1843, before the Agricultural, Horticultural, and Botanical Society, of Jefferson College. Mr. Affleck is quite at home in the theory and practice of the subject of his lecture, and speaks clearly, simply, and to the point.

To Correspondents.—S. C. Higginson, Americus No. 6, W H. Sotham, T. Affleck, Northern Farmer, Thomas Spaulding, M. Van Buren, and Examiner, No. 5, have been received the past month. We hope to find room in our next number for most of the deferred correspondence at present on hand.

REVIEW OF THE MARKET.

PRICES CURRENT IN NEW YORK, APRIL 25, 1844.

ASHES, Pots,	per 100 lbs.	$4 44	to	$4 50
Pearls,	do.	4 94	"	5 00
BACON SIDES, Smoked,	per lb.	3½	"	4½
In pickle	do.	3	"	4
BALE ROPE	do.	6	"	9
BARK, Quercitron	per ton	23 00	"	24 00
BARLEY	per bush.	52	"	56
BEANS, White	do.	1 25	"	1 75
BEEF, Mess	per bbl.	5 88	"	7 00
Prime	do.	3 88	"	5 00
Smoked	per lb.	5½	"	7
Rounds, in pickle	do.	3	"	5
BEESWAX, Am. Yellow	do.	28	"	31
BOLT ROPE	do.	12	"	13
BRISTLES, American	do.	25	"	65
BUTTER, Table	do.	15	"	20
Shipping	do.	8	"	12
CANDLES, Mould, Tallow	do.	9	"	12
Sperm	do.	29	"	38
Stearic	do.	20	"	25
CHEESE	do.	4	"	7
CIDER BRANDY, Eastern	per gal.	35	"	40
Western	do.	30	"	37
CLOVER SEED	per lb.	7½	"	8½
COAL, Anthracite	2000 lbs.	4 50	"	5 50
Sidney and Pictou	per chal.	5 75	"	6 25
CORDAGE, American	per lb.	11	"	12
CORN, Northern	per bush.	52	"	54
Southern	do.	52	"	53
COTTON	per lb.	6½	"	10½
COTTON BAGGING, Amer. hemp	per yard.	16	"	18
American Flax	do.	15	"	16
FEATHERS	per lb.	30	"	36
FLAX, American	do.	8	"	8½
FLAX SEED, rough	per 7 bush.	9 00	"	9 75
clean	do.	10 00	"	10 50
FLOUR, Northern and Western	per bbl.	4 75	"	5 00
Fancy	do.	5 25	"	5 50
Southern	per bbl.	4 75	"	5 00
Richmond City Mills	do.	6 25	"	6 50
Rye	do.	3 25	"	3 50
HAMS, Smoked	per lb.	5	"	10
Pickled	do.	4	"	7
HAY	per 100 lbs.	33	"	38
HIDES, Dry Southern	per lb.	9	"	11
HEMP, Russia, clean	per ton.	180 00	"	185 00
American, water-rotted	do.	140 00	"	180 00
do dew-rotted	do.	90 00	"	140 00
HOPS	per lb.	7	"	9
HORNS	per 100	1 25	"	5 00
LARD	per lb.	5½	"	7½
LEAD	do.	3½	"	4
Sheet and bar	do.	4	"	4½
MEAL, Corn	per bbl.	2 50	"	2 75
Corn	per hhd.	12 00	"	12 50
MOLASSES, New Orleans	per gal.	28	"	30
MUSTARD, American	per lb.	16	"	31
OATS, Northern	per bush.	32	"	34
Southern	do.	28	"	30
OIL, Linseed, American	per gal.	76	"	78
Castor	do.	95	"	98
Lard	do.	60	"	62
OIL CAKE	per 100 lbs.	1 00	"	— —
PEAS, Field.	per bush.	1 25	"	— —
PITCH	per bbl.	1 12½	"	1 37
PLASTER OF PARIS	per ton.	2 50	"	2 62
Ground, in bbls. of 350 lbs	per cwt.	1 12	"	— —
PORK, Mess	per bbl.	8 75	"	10 00
Prime	do.	7 00	"	8 00
RICE	per 100 lbs.	2 87	"	3 25
ROSIN	per bbl.	60	"	80
RYE	per bush.	70	"	71
SALT	per sack	1 00	"	1 50
SHOULDERS, Smoked	per lb.	4	"	6
Pickled	do.	3	"	4
SPIRITS TURPENTINE, Southern	per gal.	34	"	35
SUGAR, New Orleans	per lb.	5	"	8
SUMAC, American	per ton	25 00	"	27 50
TALLOW	per lb.	6	"	7½
TAR	per bbl.	1 50	"	1 02½
TIMOTHY SEED	per 7 bush.	12 00	"	14 00
TOBACCO	per lb.	3	"	6½
TURPENTINE	per bbl.	2 37	"	2 75
WHEAT, Western	per bush.	1 07	"	1 12
Southern	do.	1 00	"	1 05
WHISKEY, American	per gal.	22	"	24
WOOL, Saxony	per lb.	38	"	50
Merino	do.	35	"	40
Half-blood	do.	25	"	30
Common	3do.	20	"	25

New York Cattle Market—April 22.

At market, 1,000 Beef Cattle, (400 southern,) 160 Cows and Calves, and 300 Sheep.

PRICES.—*Beef Cattle.*—In consequence of large offerings of rather poor quality, prices have farther receded, and we quote $4.50 to $5, *a* $5.25, to $6, with a few only at $6.25. 200 left over.

Cows and Calves.—Sales at $12 *a* $28. 10 left over.

Sheep were very dull of sale at $2.50 *a* $5. 100 left over.

Hay 56 *a* 62½ cts. per cwt. for loose.

REMARKS.—*Ashes.* The quantity of these in market is small, and prices firm. *Cotton.* The late news from England, giving advices of a considerable decline there, and that the stock on hand at Liverpool on the 1st of April was 529,000 bales, against 658,000 same time last season, has had quite an effect upon this market, and sales have taken place at ⅛ to ¼ cent lower than previous to the arrival of the Acadia. Whether this reduction will continue to be submitted to by holders, remains to be seen. Export from the United States since 1st September last, 835,409 bales; same time last year, 1,476,470; same time year before, 995,587. *Flour.* Large supplies being soon expected in market, it is now dull. *Rye Flour* is scarce. *Corn-Meal* steady. *Grain* of all kinds in good demand. *Wheat* scarce. *Hay* is very dull and large supplies pressing upon the market. *Hemp* rather more inquiry. *Molasses* firm. *Naval Stores* the same. *Pork* has improved. *Beef* dull. *Lard, Butter* and *Cheese,* in good request. *Rice* inactive. *Seeds.* The season for these is nearly over, and little inquiry. *Sugar,* dull. *Tobacco* quite active.

Money is more in demand; short paper is done at 5 per cent., and long at 6; loans on real estate at 6 to 7 per cent.

Stocks are steady, without much change.

Business generally is remarkably good, and so much has not been done in this city since the spring of '36.

The weather the past month has been very favorable, and the crops of all kinds forward and looking well.

HOVEY'S SEEDLING STRAWBERRY.

The subscriber offers the above Seedling Strawberry for sale at $1,00 for sixty plants, or $1,50 per hundred. The growing plants can be seen at his office, 205 Broadway. A. B. ALLEN.

WARREN'S IMPROVED HORSE POWERS AND THRESHING MACHINES.

The subscribers continue to manufacture and vend these celebrated machines, with increased success and satisfaction. They will also manufacture a superior Four Horse Power and Thresher on the same principle this season, to sell together for only $100. The price of the Two Horse Power and Thresher together, is only $75. The Two Horse Power alone, $50. The Four Horse Power will be proportionable. Machines deliverable in this city for cash.

Besides our Beater Threshing Machine, we are making a superior Spike Thresher, adapted to be used with any power. This we shall sell at the same price. It has been tested and proved to be excellent and safe. L. BOSTWICK & CO.,

2t. 272½ Pearl st., New York.

FARMS AND REAL ESTATE FOR SALE.

Several very fine farms in different parts of the United States can be had upon the most reasonable terms. Also, beautiful country seats in this vicinity, at very cheap rates, and real estate in the city. A. B. ALLEN, 205 Broadway.

PRINCE'S LINNÆAN GARDEN AND NURSERIES.

The new Descriptive Catalogues of this establishment, comprising above 1000 varieties found in no other collection in America, and at very reduced prices, will be sent gratis to every *post paid* applicant, or may be obtained at 23 Pine street, New York. All orders are executed with despatch and in a superior style, and we guaranty the satisfaction of purchasers.

WM. R. PRINCE & CO.

Flushing, March 18th, 1844. *2t

ANALYSIS OF SOILS.

The subscriber having been called upon by the Farmers' Club of the city of New York to undertake the analysis of soils for agricultural purposes, has engaged to do so on the following terms:—

For the solution of simple questions, as to the presence or absence of lime, common salt, or gypsum in the soil, $2.

For the determination of the presence of bone, earth, potash, and the more difficult questions, $5.

Specimens of surface-soil, weighing 4 lbs., should be sent to the office of the American Agriculturist for the subscriber, a letter being forwarded at the same time to Dr. Gardner, 683 Broadway, with a remittance. Charges upon both must be paid.

D. P. GARDNER, M. D.

New York, April, 1844.

PREMIUM EAGLE PLOWS.

MANUFACTURED BY

RUGGLES, NOURSE, & MASON,

And for sale at the Manufactory in Worcester, and at their AGRICULTURAL WAREHOUSE and SEED STORE, Quincy Hall, Boston.

A full investigation and trial of plows was had in October, 1843, (occupying several days,) by an able committee of the Essex Agricultural Society, when 17 plows were presented. The committee in their report say, "in testing the quality of a plow, the *power* by which it is moved, the *ease* with which it is handled, and the *manner* in which it completes the work, are *prominent* points for consideration;" and in speaking of the Eagle Plow, to which they unanimously awarded the highest premium, they say, "As near as we can ascertain, this plow combines all the good qualities manifested in either of the others, with some peculiar to itself;" and "further, our attention was particularly called to the *quality* of the castings on the plows of Ruggles & Co., their *finish* and *durability*." "Their appearance certainly is more perfect than anything we have elsewhere seen." "The process of *chilling* the *points*, the entire *edge* of the *share*, and *flange* or *base* of the *landside*, give a permanence and durability to the work that render it of a decidedly superior character." "And we think there is no hazard in saying the value of the parts thus made, is more than doubled by the process."

At the Plowing-Matches held in Massachusetts the same year, forty-three premiums were awarded to plowmen using plows made by R., N., & M., twelve of which were the highest premiums awarded in the counties of Essex, Middlesex, Worcester, Plymouth, and Bristol.

SUBSOIL PLOWS.

Among their great variety of kinds and sizes of plows, they have several sizes of SUBSOIL PLOWS, made in form like a genuine sub-soil plow *imported* by *them* from Scotland. They have been thoroughly tested, with great satisfaction, as the increasing demand from all sections of the country testifies. The New York State Agricultural Society in September, 1843, awarded their first premium to the subsoil plow made by R., N., & M., (*entered by Benj. F. Smith of Syracuse.*) Prices, $6, $8, $10, $12, and $15.

Also, a variety of plows particularly adapted to the culture of Cotton, Rice, Tobacco, &c., in the southern states, equal in style and quality to those used in this section of the country.

At their Warehouse may be found the most extensive and complete assortment of AGRICULTURAL and HORTICULTURAL IMPLEMENTS to be found in the United States, embracing every tool used in the cultivation of the farm and garden. Also, a large and well-selected assortment of Field, Grass, Garden, and FLOWER SEEDS, all of which are offered at wholesale or retail, at prices which can not fail to suit the purchaser.

The Editor of this paper will take orders for the above plows.

SULPHATE OF SODA.

A maker of Sulphate of Soda has requested me to offer the article, fine-ground, at about one cent per pound. Any farmer, desirous of trying the article, can obtain a supply by calling at 34 Cliff street, N. Y. Extracts from Professor Johnston's work on Chemical Manures, as to the value of this sulphate, will appear in May number of the American Agriculturist.

2t WM. PARTRIDGE.

WOBURN HOGS.

For sale, a few of the celebrated Woburn or Bedford breed of Hogs, comfortably caged and delivered in New York at the following prices, viz: One Boar eleven months old, $25; three Boars, five months old, $17 each; four Sows five months old, $15 each; a few pair of spring Pigs, $25, delivered 1st of June next. Address the subscriber at New Haven, Ct. WM. K. TOWNSEND.

March 19th, 1844. 2t

LIME FOR SALE CHEAP.

The subscriber will take orders for delivering lime in any quantity, on board vessel, just above Stoney Point, on the Hudson River, at 3 cents per bushel. Samples, and an analysis of it by an eminent geologist, can be seen by calling at his office. One great object in putting the price so low, is to introduce the use of it as a manure more extensively among our farmers.

OYSTER-SHELL LIME.

Will be furnished in this city at the kilns, at 4 cents a bushel.

PLASTER OF PARIS

Ground, and put up in barrels of 350 lbs. each, at $1,12½ per barrel. This is an excellent fertilizer, easily transported, and well worthy the attention of Southern Planters. All orders should be post paid and accompanied with the money.

A. B. ALLEN, 205 Broadway, N. Y.

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GREAT SALE OF ELECTORAL SAXON SHEEP.

The undersigned will sell at vendue, the two flocks of *pure Electoral Saxon Sheep*, belonging to the estate of the late Henry D. Grove, as follows: 1st. That at Granger, Medina county, Ohio, consisting of about 400 sheep, on the 30th Sept., next, on the farm now occupied by them. 2d. The home flock, at his late residence in Hoosick, Rensselaer county, N. Y., consisting of about 350 sheep, on the 15th Oct., next. A rare opportunity is offered to those who may be anxious to improve the quality of their flocks. The following is the opinion of the distinguished manufacturer who has usually purchased Mr. Grove's wool, of the character of these flocks:—

"The purest blood in this country was introduced by the late Mr. Grove in his own flocks, the wool of which I have been familiar with since their importation in 1827. In point of fineness and admirable *felting* qualties, this wool is unsurpassed by any flock in this country, and the fleeces average about half a pound each more than any other I am acquainted with."

SAMUEL LAWRENCE.

Lowell, April 9, 1844.

The terms of the sales will be cash. Reference, Samuel Lawrence, Lowell, Mass., or the subscribers.

ELIZA W. GROVE,
W. JOSLIN,
S. A. COOK. } Administrators.

Buskirk's Bridge, N. Y., April 20, 1844.

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